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News Summary

Articles on inside pages

Not everyone is happy with the way a dispute was resolved between trustees of the University of Arkansas system and the university's Little Rock campus. Story on Page 5.

Integrating research on women into traditional liberal-arts courses is the newest front in the academic war between the sexes. Story on Page 8.

California's community colleges are being attacked for growing too rapidly—in the wrong direction. Story on Page 11.

Entrepreneurs are using computers to help students locate scholarships offered by corporations, labor unions, and other private groups. Story on Page 14.

President Reagan may propose even deeper cuts in the fiscal 1982 budget for the Department of Education than he has to date. Story on Page 15.

A proposal to halve the budget of the Fulbright program of international academic exchanges has set off a flurry of lobbying by supporters. Story on Page 15.

Civil-rights advocates and college representatives sharply disagree on some of the Labor Department's proposed changes in its affirmative-action rules. Story on Page 15.

Conservative governments now may pose more threats to higher education than leftist and radical groups, an international organization says. Story on Page 21.

Max Palevsky says his fledgling journal *democracy* was needed because other leftist journals in the U.S. had "run out of intellectual capital." Story on Page 23.

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Fall Enrollment Put at 12.3 Million, a New Record; Up 1.6 Pct. in a Year

Surveyor reports that community colleges, part-time students account for most of growth

By Jack Magarrell

College enrollment has increased again this fall to a record high, according to estimates based on a national survey of more than 1,000 institutions.

Results of the survey, conducted each fall by the University of Alabama and the American College Testing Program, indicate that total college enrollment is up about 1.6 per cent over last year's. That would mean about 12.3 million students are on American campuses this fall.

Community colleges and part-time students account for the largest share of the growth.

The number of people enrolled this fall is up by an estimated 3.2 per cent at two-year colleges, compared with 0.5 per cent at four-year institutions, according to the director of the survey, J. Ernest Mickler, who is assistant vice-president for planning and operations at the University of Alabama.

The increases are not as large as those Mr. Mickler reported a year ago. Then, the one-year enrollment increases were 7.7 per cent at two-year colleges, 3.6 per cent at four-year institutions, and 5.1 per cent at all institutions combined.

Enrollment has been deliberately reduced or limited at a number of state institutions because of budget restrictions.

This fall's increase, though small, comes at a time when the number of 18-year-olds in the population is declining. According to Census Bureau estimates, there are 1.9 per cent fewer 18-year-olds this year than there were last year and 3.4 per cent fewer than there were two years ago, when that age group reached its peak.

Job Market, Economy Cited

The continued growth of enrollment in the face of adverse population trends was attributed by Mr. Mickler to the poor job market and the general tendency for enrollments to go up when the country's economy goes down.

"This is, I think, a reflection of economics more than demographics," he said.

The enrollment increase this year might have been larger than last year's, he said, if federal aid to students had not been reduced.

New guidelines restricting the availability of federal financial aid to students could result in "substantial enrollment declines next year," he said.

Mr. Mickler said reductions in student aid this year might have contributed to the increase in part-time enrollment.

"Many who would have been full-time students probably found it financially necessary to accept jobs and enroll as part-time students," he said.

At four-year colleges and universities this fall, the number of part-time students increased by 3.1 per cent, according to the survey, while enrollment of full-time students declined by 0.5 per cent.

The number of part-time students at two-year colleges rose by 3.6 per cent this fall, compared with an increase of 2.7 per cent in full-time students.

The survey indicates that part-time students now account for 42 per cent of total enrollment—for about 28 per cent at four-year institutions and 61 per cent at two-year colleges.

Women outnumber the men enrolled at

Continued on Page 10, Column 1

Scientists Warn White House, Congress About Dangers of Cuts in Basic Research

By Kim McDonald

WASHINGTON

Anticipating severe reductions in federal support, more than 80 leaders in American science—including university presidents and directors of national laboratories—have warned the Reagan Administration that deep cuts in basic research would do "irreversible damage" to the country's science and technology enterprise.

In a statement sent to members of Congress as well as Administration officials, the scientists and administrators argued that strong programs of basic research were necessary to support the President's own goals of economic growth and increased national security.

Basic research, as well as science-education programs, they said, should be protected from "abrupt changes" in federal support and from across-the-board cuts in research-and-development funds.

'Unprecedented' Meeting

The statement came from a meeting of science leaders—who included several Nobel Prize winners—at the National Academy of Sciences last week. The meeting was organized by Frank Press, president of the academy and former science adviser to President Carter. The purpose was to bring the scientists together with Administration officials to try to find ways of preserving basic research while meeting the Administration's goals of reducing the federal budget.

Mr. Press said he had organized the "unprecedented" meeting after receiving numerous calls from university administrators and directors of national laboratories expressing alarm about President Reagan's

Continued on Page 17, Column 1

CHRONICLE PHOTOGRAPH BY JOHN C. PHILLIPS

Marvin L. Goldberger, California Institute of Technology: "I don't think we should just simply sit back and roll over about taking these cuts."

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Paul E. Gray, Massachusetts Institute of Technology: Government budgeting "has an extremely erosive effect on research at universities."

FACT-FILE

Adult-Education Students

Number of registrations in noncredit courses, 1979-80

Subject area	Universities	Other 4-year	2-year	Public	Private	All institutions
Agriculture and natural resources	215,685	31,048	75,122	320,099	1,756	321,855
Architecture and environmental design	14,215	5,351	12,179	24,959	6,786	31,745
Area studies	8,720	7,435	47,500	58,142	5,513	63 655
Biological sciences	18,829	19,811	13,534	47,597	4,577	52,174
Business and management						
Accounting	25,161	15,927	32,032	59,154	13,966	73,120
Investments and securities	19,918	20,889	45,240	69,374	16,673	86,047
Marketing and purchasing	17,853	8,935	12,127	30,462	8,453	38,915
Real estate	55,668	36,148	102,951	165,081	29,686	194,767
Other	321,101	176,711	318,319	733,443	82,688	816,131
Communications	33,257	48,036	73,872	125,831	29,334	155,165
Computer and information sciences	12,708	21,114	21,312	40,389	14,925	55,214
Education	342,145	155,524	324,395	696,783	125,281	822,064
Engineering	160,918	57,984	45,023	243,897	20,028	263,925
Fine and applied arts						
Art	26,422	44,580	257,713	294,424	34,291	328,715
Music	34,110	60,269	98,296	171,279	21,396	192,675
Dance and drama	21,525	59,848	248,896	305,596	24,673	330,271
Other	37,092	113,238	301,605	393,063	58,872	451,935
Foreign languages	25,489	43,153	83,851	123,082	29,411	52,493
Health professions						
Nursing	121,677	112,972	57,303	224,765	67,187	291,952
Medicine	294,727	306,324	2,160	365,792	237,419	603,211
Other	223,374	191,546	308,923	637,115	86,728	723,843
Home economics	82,244	53,957	514,010	623,423	26,788	650,211
Interdisciplinary studies						
Women's studies	36,978	24,677	44,508	73,783	32,380	106,163
Civic and community affairs	58,590	57,411	128,807	225,192	19,616	244,808
Other	64,345	11,470	28,762	85,855	18,722	104,577
Law	72,606	23,241	36,111	98,327	33,631	131,958
Letters	46,596	38,157	51,911	106,736	29,928	136,664
Library science	7,560	1,356	3,289	10,667	1,538	12,205
Mathematics	7,736	21,683	19,204	44,377	4,246	48,623
Military sciences	263	202	2,386	2,844	7	2,851
Occupational technologies						
Business and commerce	52,563	21,664	276,508	338,743	11,692	350,435
Data processsing	5,317	3,319	32,101	34,508	6,229	40,737
Health and paramedical	38,618	28,846	355,429	385,882	37,011	422,893
Mechanical and engineering	20,386	36,521	421,036	466,842	11,101	477,943
Natural science	13,134	33,601	105,485	143,291	8,929	152,220
Public-service-related	46,980	52,949	132,791	226,276	6,444	232,720
Other	337	325	6,926	7,588	0	7,588
Physical education and avocational instruction						
Hobbies	5,996	30,321	226,775	250,147	12,945	263,092
Physical fitness	50,994	34,934	349,048	397,582	37,394	434,976
Sports	82,689	30,844	286,927	374,791	25,669	400,460
Other	10,370	8,328	144,046	157,351	5,393	162,744
Physical sciences	22,766	13,374	24,297	55,950	4,487	60,437
Psychology	41,053	36,733	111,225	159,721	29,290	189,011
Public affairs and services	176,043	72,463	91,007	322,898	16,615	339,513
Social sciences	60,644	136,670	70,686	243,507	24,493	268,000
Theology	53,318	33,080	8,764	25,575	69,587	95,162
Other subject areas	41,923	5,139	8,299	39,998	15,363	55,361
Total	**3,154,100**	**2,393,802**	**6,738,320**	**10,831,664**	**1,454,558**	**12,286,222**

Note: Data are from a 1980 survey based on a stratified sample of 500 colleges and universities.

SOURCE: NATIONAL CENTER FOR EDUCATION STATISTICS

3 in 4 Colleges Found Offering Noncredit Study

WASHINGTON

About three-quarters of the country's colleges and universities now offer noncredit education for part-time adult students, according to a new survey by the National Center for Education Statistics.

The survey found that of 3,165 higher-education institutions, 2,285 provided some form of adult and continuing education. Included in the group are 158 universities, 1,148 four-year institutions, and 979 two-year colleges. The remaining institutions offered no noncredit activities.

More than 85 per cent of the offerings were in academic and professional areas such as business, education, health, liberal arts, and sciences. About 15 per cent were courses in technology for business, industry, and other fields.

In general, N.C.E.S. defines adult and continuing education as "organized instructional activities" at least three hours long for adults who want to increase their general knowledge or improve their skills through part-time education.

According to the survey, which is conducted every two years, higher-education institutions had a total of 12.3 million registrations in noncredit offerings in 1979-80.

Somewhat fewer than a third of the registrations were in courses in continuing professional education. Half were at two-year colleges.

Robert Calvert, Jr., project officer for the survey, said the 1980 figures indicated that participation by colleges and universities in noncredit instruction was leveling off.

'A Whopping Increase'

"The number of institutions that offered continuing education and the number of course registrations more than doubled between 1968, when 1,100 institutions reported 5.6 million registrations, and 1976," he said. "This was a whopping increase. Since then we have reached a plateau."

Earlier surveys showed that since 1976, about the same number of colleges and universities had continued to offer noncredit programs, although the number of students enrolling in continuing education had increased steadily. In the survey two years ago, institutions reported about 10.2 million registrations.

The new survey found that far more public than private colleges and universities provided noncredit education.

About 1,395 public institutions, but only 890 private ones, offered instruction for adults. Another 785 private institutions were not involved in continuing education.

More than half the colleges and universities now award "continuing-education units" as a measure of participation in noncredit instruction.

The 1980 survey was based on a stratified sample of 500 colleges and universities, rather than on the total number of higher-education institutions that participate in the annual N.C.E.S. Higher Education General Information Survey.

The final report based on the survey should be available late in December from the Adult and Vocational Surveys and Studies Branch, National Center for Education Statistics, 400 Maryland Ave. S.W. (Presidential Building), Washington 20202.

—BEVERLY T. WATKINS

The Ministry of Education of
THE PEOPLE'S REPUBLIC OF CHINA
and
The U.S.-China Education Foundation

*Announce for the Summer of 1982
and the Academic year 1982-83*

LANGUAGE COURSES IN CHINA

Some of our study sites include:

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The Central Institute of Nationalities, Beijing
Central China Teachers College, Wuhan
Inner Mongolia University, Hohhot
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upon the university in China)
Fall 1982 through Spring 1983

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Cost for summer is $2,995 which includes tuition, room and board, all fees in China, air travel with west coast departure.

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News Summary

Articles on inside pages

The Educational Testing Service is moving to allow more scrutiny of its tests and to reduce the pressure for federal intervention. Story on Page 3.

A $33-million cut in the University of Washington's biennial budget may mean layoffs of nearly 900 employees and disruption of faculty members' careers. Story on Page 5.

Frank Press may prove more visible as the new president of the National Academy of Sciences than he was as President Carter's science adviser. Story on Page 9.

Public broadcasting will begin experimenting with commercial advertising next spring. Story on Page 8.

Medical schools must increase their emphasis on preventing, not just curing, disease, says Richard S. Schweiker, Secretary of Health and Human Services. Story on Page 8.

The U.S. Supreme Court has been urged not to let a citizens' group challenge the transfer of surplus federal property to a church college. Story on Page 15.

Many black colleges have been inadvertently excluded from a program aiding developing institutions, say two Senators. Story on Page 16.

Legislators, as well as college groups, are unhappy with the Education Department's proposals for distributing Pell Grants next year. Story on Page 17.

To the dismay of some of its fans, science fiction is firmly entrenched in university classrooms and scholarly criticism. Story on Page 21.

Dissatisfaction has spread among black students in South African universities, says an institute of race relations. Story on Page 19.

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Faculty Salaries Up 8.9 Pct. but Fail to Keep Pace with Consumer Prices

By Jack Magarrell

Faculty salaries are 8.9 per cent higher this year than last, according to the Chronicle Survey.

Only a few months ago, that increase would have appeared to be keeping up with the cost of living, but the latest report on consumer prices changed that.

In the three months following July 1, when many institutions started their fiscal years, the Labor Department's Consumer Price Index rose at a seasonally adjusted annual rate of 13.5 per cent.

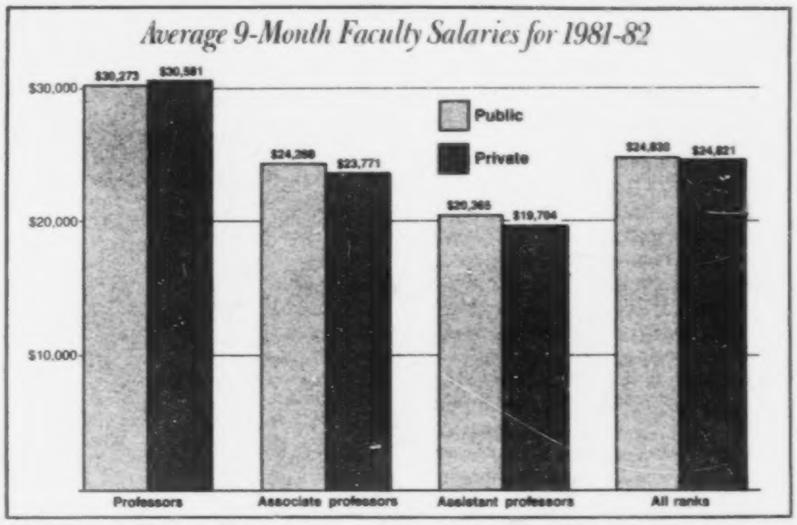
Downward Price Trend Reversed

That rate contrasted sharply with the price trend from January through June, when administrators, trustees, and legislators were making decisions about faculty-salary increases.

The Labor Department said the Con-

Continued on Page 13, Column 1

Average 9-Month Faculty Salaries for 1981-82



CHRONICLE CHART BY PETER H. STAFFORD

SOURCE: CHRONICLE SURVEY BY JOHN MINTER ASSOCIATES

Cuts in U.S. Research Support Batter National Laboratories

By Kim McDonald

WASHINGTON

While universities are feeling the pinch of limited federal support for research, the situation at many national laboratories—where some university scientists conduct their investigations—is substantially worse.

Directors of many of the major national laboratories supported by the Department of Energy say they have already made substantial reductions in their staffs to meet reduced budgets and to prepare for further cuts this year.

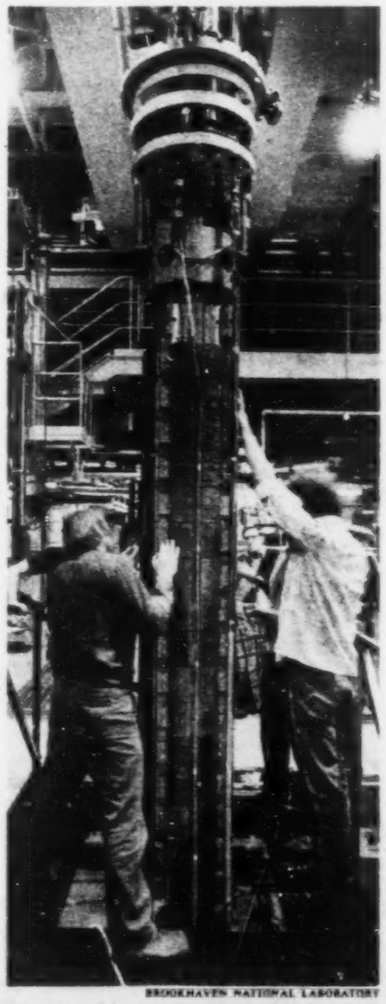
At Lawrence Berkeley Laboratory in California and at the Fermi National Accelerator Laboratory in Batavia, Ill., for example, 12 per cent of the employees have recently been laid off, according to directors there.

At the Brookhaven National Laboratory in New York, staff reductions will approach 25 per cent within a year, according to its director, George H. Vineyard.

"President Reagan's announcement . . . that the fiscal year 1982 budget for most government agencies was to be reduced a further 12 per cent sent a wave of apprehension through our national laboratories and major research universities," said Frank Press, president of the National Academy of Sciences, in a recent editorial in *Science* magazine.

"The earliest impact will be felt in the

Continued on Page 10, Column 1



BROOKHAVEN NATIONAL LABORATORY

Researchers check a prototype of a superconducting magnet designed for a particle accelerator at Brookhaven. Budget cuts threaten the project.

Minnesota Fights State Dept. Limits on Chinese Student

By Austin C. Wehrwein

MINNEAPOLIS

The president of the University of Minnesota has strongly rejected a State Department demand that the institution restrict a visiting Chinese student's computer-science studies here.

President C. Peter Magrath said he was "appalled and puzzled" by a letter that the university had received from Keith Powell, II, a State Department exchange officer on the China desk.

Mr. Powell asked that the university limit the activities of Qi Yulu, an exchange student from the Institute of Computer Technology at the Chinese Academy of Sciences in Peking.

'Minimal Involvement'

The letter, addressed to W. R. Franta, a professor of computer science who is the Chinese student's adviser, suggested that Qi Yulu be denied access to unpublished or classified government-financed work and that his courses have "minimal involvement" in applied research.

"The U.S. government regularly reviews the programs of Chinese exchange visitors in scientific and technical programs to meet export control and national security concerns," it said. "Various government technicians have reviewed the program of Qi Yulu."

In Qi Yulu's case, Mr. Powell said, the reviewers had "concerns about the potential loss of critical U.S. technology in the area of computer-software technology."

His letter said, "There should be no ac-

Continued on Page 10, Column 1

CHRONICLE SURVEY

Faculty Salaries for 1981-82

Estimates of college and university pay, with year's increases by rank and type of institution

Salaries of full-time faculty members on 9-month contracts

	Public				Private				Total			
	Average (a)	High (b)	Median (c)	Low (d)	Average (a)	High (b)	Median (c)	Low (d)	Average (a)	High (b)	Median (c)	Low (d)
Institutions granting doctoral degrees												
Professor	$34,684	$40,000	$34,286	$30,000	$36,700	$40,700	$36,000	$33,100	$35,223	$40,150	$35,800	$32,000
Associate professor	25,488	27,700	24,800	22,680	26,694	31,000	26,000	24,500	25,810	28,381	25,154	23,700
Assistant professor	21,133	23,000	20,400	18,532	21,427	25,510	21,401	19,000	21,212	23,496	20,500	18,800
All ranks	27,546	33,000	26,150	21,578	30,573	37,000	31,800	24,717	28,355	35,000	27,913	22,582
Institutions granting other graduate degrees												
Professor	$29,926	$33,317	$30,150	$26,000	$29,711	$32,000	$29,000	$25,375	$29,868	$32,890	$29,500	$25,784
Associate professor	24,109	26,000	24,000	22,774	23,161	25,200	22,600	20,500	23,854	25,401	23,500	21,150
Assistant professor	19,841	21,714	19,610	18,150	20,234	21,100	19,000	17,850	19,947	21,200	19,550	18,000
All ranks	24,712	28,700	24,228	20,800	23,508	26,900	22,600	18,700	24,388	28,000	23,800	19,610
Institutions granting only bachelor's degrees												
Professor	—	—	—	—	$24,329	$29,350	$24,995	$21,000	$24,329	$29,350	$24,995	$21,000
Associate professor	—	—	—	—	21,088	23,300	20,903	18,065	21,088	23,300	20,903	18,065
Assistant professor	—	—	—	—	16,734	18,628	17,100	15,500	16,734	18,628	17,100	15,500
All ranks	—	—	—	—	19,715	23,734	19,450	16,500	19,715	23,734	19,450	16,500
2-year institutions with academic ranks												
Professor	$25,949	$28,650	$23,900	$21,000	—	—	—	—	$25,949	$28,650	$23,900	$21,000
Associate professor	23,157	24,550	22,675	20,150	—	—	—	—	23,157	24,550	22,675	20,150
Assistant professor	20,239	22,000	20,600	18,000	—	—	—	—	20,239	22,000	20,600	18,000
All ranks	22,067	24,250	21,490	19,000	—	—	—	—	22,067	24,250	21,490	19,000
Institutions without academic ranks												
Total	$24,086	$28,000	$23,073	$20,200	—	—	—	—	$23,941	$27,939	$23,000	$20,000
All institutions except those without academic ranks												
Professor	$30,273	$36,000	$31,256	$27,000	$30,581	$36,000	$29,700	$24,950	$30,353	$36,000	$30,600	$26,000
Associate professor	24,268	26,185	24,100	22,000	23,771	25,750	22,500	19,822	24,138	26,000	23,760	21,000
Assistant professor	20,365	22,000	19,980	18,100	19,704	20,200	18,133	16,400	20,192	21,153	18,800	17,000
All ranks	24,838	29,880	24,344	20,500	24,821	28,600	22,400	18,065	24,834	29,215	23,500	19,000

Salaries of full-time faculty members whose contracts are for 10, 11, or 12 months

10 months, all ranks	$24,415	$27,960	$24,500	$21,499	$24,235	$27,800	$23,000	$19,440	$24,777	$27,876	$23,506	$20,400
11 or 12 months, all ranks	28,102	34,000	27,047	21,600	25,961	28,100	22,000	18,585	27,543	31,000	24,000	19,330

Increase over 1980-81 salaries, 9-month contracts

	Public				Private				Total			
	Average (e)	High (f)	Median (g)	Low (h)	Average (e)	High (f)	Median (g)	Low (h)	Average (e)	High (f)	Median (g)	Low (h)
Institutions granting doctoral degrees												
Professor	8.2%	11.0%	7.7%	5.5%	10.0%	13.4%	10.7%	8.6%	8.7%	12.8%	9.4%	6.4%
Associate professor	8.2%	11.2%	7.8%	5.3%	12.5%	16.3%	12.3%	8.5%	9.4%	12.9%	8.9%	6.0%
Assistant professor	8.7%	12.5%	7.6%	5.0%	10.4%	12.5%	8.7%	7.7%	9.2%	12.5%	8.1%	6.0%
All ranks	8.3%	11.2%	7.7%	5.3%	10.4%	13.9%	10.1%	7.8%	8.9%	12.7%	9.0%	6.1%
Institutions granting other graduate degrees												
Professor	7.3%	10.1%	6.8%	4.9%	9.7%	12.2%	9.5%	7.7%	7.9%	11.1%	8.3%	6.0%
Associate professor	9.1%	12.0%	8.7%	6.0%	11.6%	15.0%	10.4%	8.4%	9.7%	13.5%	10.0%	7.7%
Assistant professor	8.2%	10.5%	7.0%	5.2%	9.7%	12.2%	10.2%	6.3%	8.6%	12.0%	8.3%	6.0%
All ranks	8.1%	11.1%	7.5%	5.3%	10.5%	12.6%	10.0%	7.9%	8.7%	12.0%	9.1%	6.3%
Institutions granting only bachelor's degrees												
Professor	—	—	—	—	10.0%	12.1%	10.0%	7.5%	10.0%	12.1%	10.0%	7.5%
Associate professor	—	—	—	—	9.7%	12.1%	9.8%	6.7%	9.7%	12.1%	9.8%	6.7%
Assistant professor	—	—	—	—	10.1%	12.3%	10.0%	6.9%	10.1%	12.3%	10.0%	6.9%
All ranks	—	—	—	—	9.9%	12.3%	9.9%	6.9%	9.9%	12.3%	9.9%	6.9%
2-year institutions with academic ranks												
Professor	9.9%	15.0%	9.5%	6.6%	—	—	—	—	9.9%	15.0%	9.5%	6.6%
Associate professor	8.9%	11.6%	10.0%	7.8%	—	—	—	—	8.9%	11.6%	10.0%	7.8%
Assistant professor	9.5%	12.7%	9.9%	6.2%	—	—	—	—	9.5%	12.7%	9.9%	6.2%
All ranks	8.9%	12.5%	9.8%	6.2%	—	—	—	—	8.9%	12.5%	9.8%	6.2%
Institutions without academic ranks												
Total	8.7%	11.5%	9.4%	5.9%	—	—	—	—	8.7%	11.7%	9.4%	6.1%
All institutions except those without academic ranks												
Professor	8.3%	10.9%	7.4%	5.5%	9.8%	12.8%	10.0%	7.8%	8.7%	12.3%	9.1%	6.5%
Associate professor	8.7%	11.5%	8.7%	5.7%	11.5%	13.8%	10.0%	7.8%	9.4%	12.6%	9.7%	6.8%
Assistant professor	8.8%	12.0%	7.4%	5.2%	10.0%	12.4%	9.8%	6.9%	9.1%	12.3%	9.1%	6.2%
All ranks	8.4%	11.2%	7.8%	5.3%	10.4%	12.7%	10.0%	7.6%	8.9%	12.4%	9.2%	6.3%

Increase over 1980-81 salaries, contracts for 10, 11, or 12 months

10 months, all ranks	7.9%	10.5%	7.3%	4.8%	10.6%	12.2%	10.1%	7.4%	8.6%	11.8%	8.7%	5.8%
11 or 12 months, all ranks	6.9%	9.8%	6.9%	2.5%	9.5%	12.3%	10.0%	6.5%	7.5%	11.8%	9.2%	5.2%

SOURCE: SURVEY FOR THE CHRONICLE BY JOHN MINTER ASSOCIATES

(a) Estimated mean base salary for 1981-82. Does not include additional earnings or fringe benefits.
(b) One-fourth of the faculty members receive this amount or more.
(c) One-half of the faculty members receive this amount or more.
(d) One-fourth of the faculty members receive this amount or less.
(e) Increase in average salary in 1981-82 over 1980-81.
(f) One-fourth of the faculty members received salary increases larger than this.
(g) One-half of the faculty members received salary increases larger than this.
(h) One-fourth of the faculty members received salary increases smaller than this.
— Indicates too few data for reliable estimate.

Note: Survey data are based on responses of 4,319 individuals, weighted to represent faculty members at colleges and universities of all types except law and medical schools, proprietary institutions, private two-year colleges, and colleges with fewer than 500 students. Faculty members in the group from which the sample was drawn were those who offered courses in the fall of 1980. Those hired for their first faculty jobs in the fall of 1981 were not included.

Salary figures do not include the value of contributed services of members of religious orders or others.

There is a 95-per-cent probability that the mean salary for all ranks, all institutions is within $624 of the amount listed. Statistical confidence intervals for other salary averages in the table are included in a technical report on survey design and sampling statistics, which will be available from John Minter Associates late in January. Specific questions may be addressed to John Minter Associates, P.O. Box 107, Boulder, Colo. 80306.

Faculty Salaries Rise but Fail to Keep Up with Prices

Continued from Page 1

sumer Price Index had risen at seasonally adjusted annual rates of 9.6 per cent in the first quarter of 1981 and 7.4 per cent in the second quarter. Those rates were down dramatically from the price increases of 12.4 per cent reported for 1980 and 13.3 per cent for 1979.

The estimated increase of 8.9 per cent for faculty members compares with an average wage adjustment of 11.5 per cent in the first year of contracts signed in major collective-bargaining settlements in private industry during the first nine months of this year.

The Commerce Department reported that during the 12 months ending September 30, average hourly earnings of workers in private, nonfarm jobs rose 8.7 per cent, but for some workers there were fewer hours of work per week. The Labor Department said average weekly earnings of production workers and other nonsupervisory workers on private, nonfarm payrolls rose 7.6 per cent during the 12 months.

10 Pct. Raises at Private Colleges

The Chronicle Survey of faculty salaries was designed and conducted by John Minter Associates, a research organization in Boulder, Colo., that specializes in higher-education studies.

The survey, which collected data this fall from 4,319 individual faculty members in a national sample, found that, compared with last year's salary increases, faculty members at public institutions got smaller raises this year while those at private institutions got more.

The average salary increase for faculty members at public colleges and universities was 8.4 per cent, compared with 10.4 per cent for those at private institutions. A year ago, the average increases were 8.6 per cent at public institutions and 9.9 per cent at private institutions.

The average increase of 8.9 per cent for all faculty members is the same as last year's, according to the survey.

The average salary this year for full-time faculty members on nine-month contracts is $24,834, the survey found. At private institutions, the average is $24,821; at public institutions, $24,838.

2-Year Colleges Average $22,067

At private research and Ph.D.-granting universities, faculty members report an average salary of $30,573 this year, an increase of 10.4 per cent over last year. At comparable public institutions, the average is $27,546, an increase of 8.3 per cent.

At private colleges offering only bachelor's degrees, the average salary is $19,715, an increase of 9.9 per cent. At public community colleges, the average is $22,067, an increase of 8.9 per cent.

The Chronicle Survey sample did not include faculty members in medical or law schools, at proprietary institutions, private junior colleges, or institutions with fewer than 500 students. Persons not employed as faculty members a year ago were not included in the sample. The salary figures do not include fringe benefits or additional earnings.

Survey data to be analyzed and reported in future issues of *The Chronicle* include faculty members' earnings above base salaries, as well as salary variations by discipline, sex, age, and tenure status.

The Chronicle Survey's salary data are obtained directly from individual faculty members, in contrast to the salary data that are collected later in the year from colleges and universities by the National Center for Education Statistics and the American Association of University Professors.

AAUP to Enlarge Faculty Pay Study After U.S. Cutback

WASHINGTON

The American Association of University Professors is sending questionnaires on faculty salaries to colleges and universities this fall in an effort to fill an information gap opened up by budget cuts at the Department of Education.

The A.A.U.P. received a grant from the Exxon Education Foundation to cover costs of the survey.

Each year the A.A.U.P. publishes data on faculty salaries for the previous academic year. The association conducted its own yearly surveys of faculty salaries from 1958 through 1975 but since then has relied on the Department of Education's National Center for Education Statistics to gather the information.

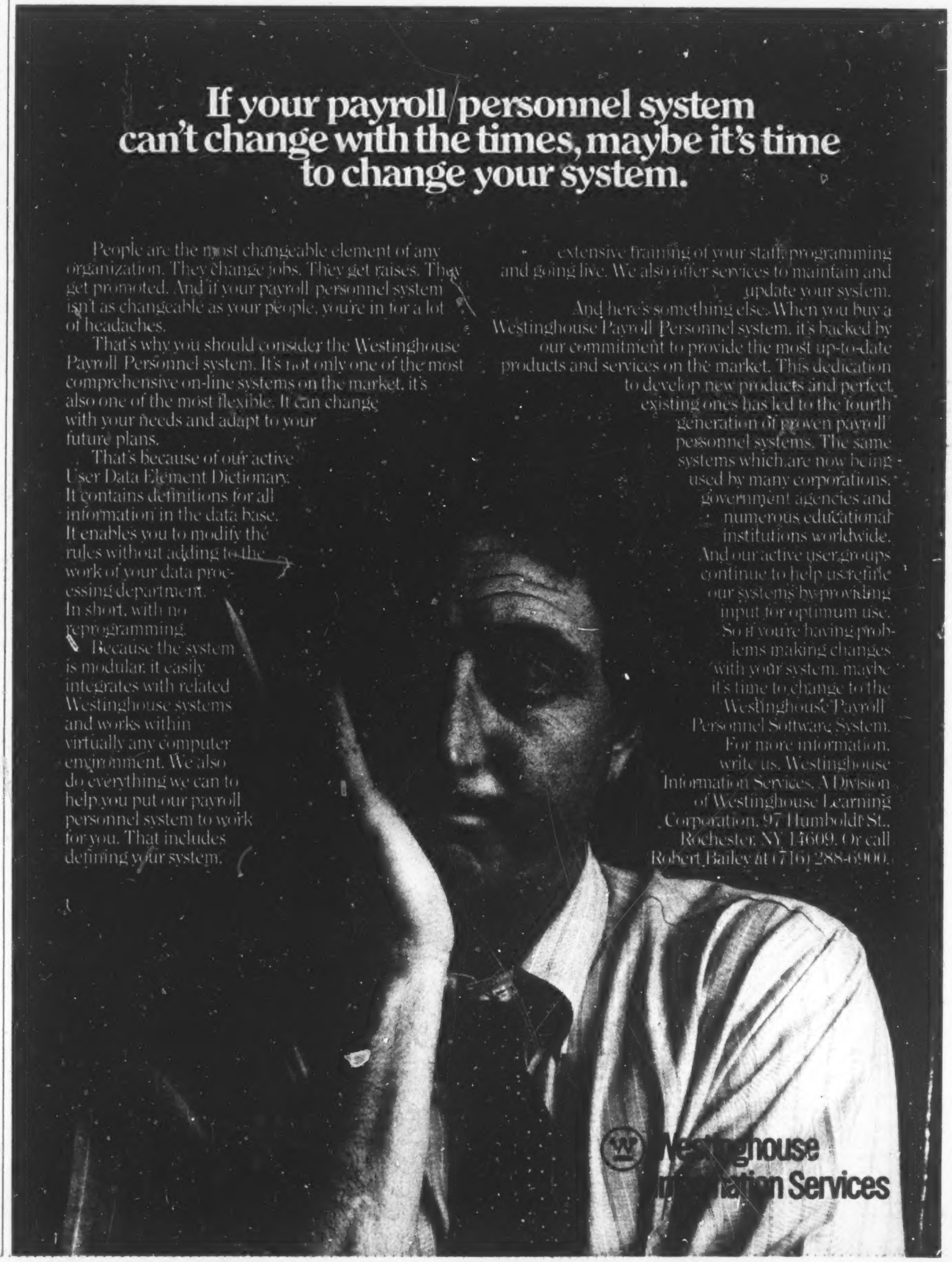
Less Comprehensive

Irving J. Spitzberg, Jr., general secretary of the faculty organization, said orders from the Office of Management and Budget had forced N.C.E.S. to make its survey less comprehensive. So the A.A.U.P. will gather supplementary data on faculty salaries.

The A.A.U.P. survey will contain only salary questions deleted from the federal study, he said.

The A.A.U.P. questionnaire deals specifically with average salaries and pay raises of faculty members who taught at the same institution last year and this year, and with the number of men and women employed at each of 50 salary levels.

Data from both the A.A.U.P. and N.C.E.S. surveys will be used to prepare the faculty organization's annual salary report. The salary report will be prepared by Maryse Eymonerie, former A.A.U.P. research director, who is now an independent contractor. —J.M.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News Summary

Articles on inside pages

College classes in prisons may be losing favor, due to economic and political pressures. Story on Page 6.

Florida's Supreme Court weighs the state legislature's bid to deny aid to the University of South Florida, because of a sexual-freedom controversy. Story on Page 10.

The Moral Majority isn't seeking a religious revolution on American campuses, says a high official of the organization. Story on Page 13.

State governments will increase their support for college scholarships by 10.3 per cent this year. Story on Page 16 and Fact-File on Pages 17-18.

Administrators of public colleges and universities are stepping up their opposition to federal budget cuts for higher education. Stories on Page 16.

Average salaries for faculty members in engineering and computer science outstrip those in the humanities by about 15 per cent, the Chronicle Survey finds. Story and table on Pages 14-15.

Elimination of the $77-million State Student Incentive Grant program has been approved by the Senate Appropriations Committee. Story on Page 21.

The Supreme Court has heard arguments in a trespassing case involving Princeton University. Story on Page 21.

The market for composition textbooks is thriving in the wake of the "literacy crisis." Story on Page 27.

Israeli authorities have closed Bir Zeit University, on the occupied West Bank of the Jordan River. Story on Page 25.

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Luck, as Well as Merit, Plays a Role in NSF Grant Process, Study Finds

By KIM McDONALD

WASHINGTON

Whether researchers are awarded grants by the National Science Foundation depends not only on the merit of their grant proposals, but, to a significant extent, on their luck in obtaining reviewers who regard their ideas favorably, according to the results of a study published in this week's issue of *Science* magazine.

The study also found that the element of chance in the grant-award process results from disagreement among scientists about "what good science is or should be."

"Science is not a system that is characterized by consensus," said Stephen Cole, one of the authors of the report, in a telephone interview. "There are high levels of disagreement."

The five-year study was conducted by Mr. Cole, professor of sociology at the State University of New York at Stony Brook; his brother Jonathan R. Cole, professor of sociology and director of the Center for the Social Sciences at Columbia University; and Gary A. Simon, an associate professor of applied mathematics at Stony Brook.

Study Requested by Congress

Stephen Cole said the study had been requested by Congress and conducted by the National Academy of Sciences with the cooperation of the N.S.F. The three researchers were consultants to the academy, which plans to publish a more extensive 150-page report on the study later this month.

In the first phase of their work, reported in 1978, the researchers found that the N.S.F. peer-review process did not systematically favor more eminent scientists at the expense of the less eminent, as some critics had contended.

In the second phase, reported this week, they sought to determine whether independently selected panels of reviewers would reach conclusions similar to those of the N.S.F. grant reviewers.

Nearly all federal agencies use a peer-review system to judge research proposals submitted to them. The N.S.F. selects five experts in each field covered by the proposals, and their decisions largely determine whether a grant is awarded.

The researchers said they had discovered the significant role of chance in N.S.F. awards by asking the independent panels to judge 150 research proposals—half of

Continued on Page 23, Column 1

Community Colleges Face Tough Competition for Funds, First-Time Students, Report Says

WASHINGTON

Community colleges, which now enroll nearly half of all first-time college students in the United States, could face sharp controversies over their financing and intense competition from other colleges and universities in the next decade, according to an economic analysis of their prospects published this week by the Brookings Institution.

In *Financing Community Colleges: An Economic Perspective*, David W. Breneman and Susan C. Nelson argue that in the years of expansion from 1960 through the mid-1970's, community colleges had virtually no competition for the nontraditional students that make up a large part of their enrollment.

"For many years community colleges were in the vanguard of the movement to extend postsecondary education to groups not previously served, and the more traditional colleges and universities ceded them that activity," they say.

However, they add, "as the number of people aged 18 to 21 declines, community colleges will experience much greater competition from the rest of higher education."

That growing competition, say Mr. Breneman and Ms. Nelson, will require state legislatures and other policy-making bodies to answer several difficult questions. Among them:

▶ "Should the comprehensive mission of the community colleges be maintained, or should public policy encourage a greater division of labor among institutions, with each type concentrating on those educational functions that it performs best?

▶ "Should public universities be encouraged to undertake many of the same programs that community colleges have heretofore emphasized, such as noncredit short courses, remedial programs, community services, avocational programs, or narrowly vocational or technical offerings?

▶ "With excess capacity in the college and university sector, should full-time baccalaureate-oriented students aged 18 to 21 be encouraged to enroll directly in a four-year college or university rather than in the first two years of a community-college transfer program?

▶ "Should tuition in community col-

Continued on Page 20, Column 1

10 African-Studies Centers Reject Ties with Spy Agency

By MALCOLM G. SCULLY

WASHINGTON

The directors of African-studies centers at 10 U.S. universities have declined to participate in an effort by the Defense Intelligence Agency to establish formal links with American academic institutions.

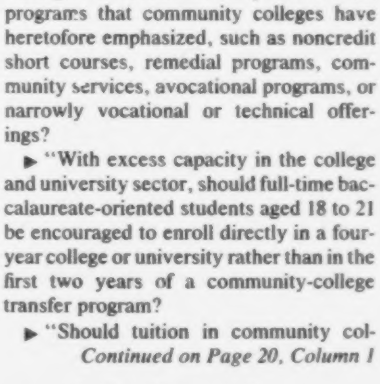
The agency, created in 1961 to coordinate the intelligence-gathering activities of the Department of Defense, hopes to spend about $500,000 in the 1982 fiscal year on training in African languages and cultures, according to Walter Longanecker, special assistant for education and training at D.I.A.

While it has not said exactly what kind of links it would like to establish with American institutions, the agency has reportedly approached at least four African-studies centers about the prospect of developing a "relationship."

In all cases, the institutions have rejected any formal arrangement, said David Wiley, director of the African Studies Center at Michigan State University. Mr. Wiley said his center, along with those at Boston, Indiana, and Howard Universities, had been approached by the intelligence agency.

He added that the directors of the four centers and those of six others had been discussing the D.I.A.'s interest since last summer. The 10 met most recently during a meeting of the African Studies Association this month at Indiana University and

Continued on Page 20, Column 1



MICHIGAN STATE UNIVERSITY

David Wiley, spokesman for the directors of African studies

CHRONICLE SURVEY

Faculty Salaries for 1981-82 by Rank and Discipline

	All institutions					Public 4-year institutions					Private 4-year institutions				
	Average (a)	Change (b)	High (c)	Median (d)	Low (e)	Average (a)	Change (b)	High (c)	Median (d)	Low (e)	Average (a)	Change (b)	High (c)	Median (d)	Low (e)
Arts, fine and applied															
Professor	$29,878	7.7%	$33,856	$27,900	$24,000	$30,349	6.1%	$35,621	$30,000	$27,100	$30,737	8.8%	$32,000	$27,700	$24,000
Associate professor	23,470	9.4%	25,750	22,500	20,800	24,281	8.3%	25,837	23,949	21,000	23,591	12.4%	26,400	22,300	19,400
Assistant professor	19,180	7.4%	20,229	18,200	16,300	19,715	8.4%	21,100	20,100	18,700	19,858	6.4%	18,300	17,700	15,600
All ranks (f)	24,107	8.1%	27,100	21,650	18,200	24,032	7.3%	27,760	22,281	19,600	27,102	9.4%	26,400	21,375	17,700
Business and economics															
Professor	$31,923	11.5%	$42,250	$36,000	$30,000	$33,364	11.3%	$38,400	$34,000	$28,834	$33,903	9.9%	$44,500	$40,000	$32,500
Associate professor	26,017	10.7%	30,450	26,316	22,675	27,496	11.2%	30,000	28,065	24,200	27,290	10.4%	31,000	27,400	24,400
Assistant professor	22,995	10.6%	24,010	21,500	18,875	24,372	10.4%	25,975	22,500	20,000	21,936	10.3%	23,500	20,950	18,325
All ranks (f)	26,911	11.0%	33,150	27,250	21,000	28,444	11.0%	33,535%	28,500	23,577	27,925	10.9%	34,000	26,000	20,950
Engineering and computer science															
Professor	$32,954	10.6%	$39,800	$36,000	$31,600	$34,202	9.1%	$39,800	$35,000	$32,000	$34,282	11.6%	$40,300	$36,950	$31,600
Associate professor	26,799	10.3%	30,000	27,000	24,000	27,750	10.8%	30,700	28,180	26,000	26,304	12.5%	29,125	[illegible]	22,800
Assistant professor	23,500	11.5%	26,225	24,500	22,900	—	—	—	—	—	—	—	—	—	—
All ranks (f)	27,535	10.1%	36,900	30,050	25,950	28,959	10.2%	35,500	30,100	28,000	29,159	12.4%	38,250	30,300	26,000
Humanities (g)															
Professor	$29,476	8.4%	$33,500	$28,100	$25,000	$31,897	7.7%	$36,000	$31,900	$27,413	$29,196	10.3%	$32,855	$22,970	$23,732
Associate professor	23,441	9.8%	24,500	22,600	20,500	23,908	8.7%	24,800	23,900	22,000	21,737	12.8%	24,000	21,700	19,000
Assistant professor	19,179	8.5%	20,000	18,000	15,500	19,171	7.7%	20,400	18,950	17,500	17,728	8.9%	18,800	16,200	14,500
All ranks (f)	23,976	8.7%	26,900	22,549	18,300	24,994	8.1%	28,884	24,000	19,524	23,775	10.1%	26,700	21,400	17,200
Physical education															
Professor	$28,868	7.9%	$31,387	$27,330	$24,500	—	—	—	—	—	—	—	—	—	—
Associate professor	24,593	8.3%	27,710	24,000	22,700	—	—	—	—	—	—	—	—	—	—
Assistant professor	20,197	9.2%	21,008	20,050	17,742	—	—	—	—	—	—	—	—	—	—
All ranks (f)	24,362	8.4%	27,000	23,055	20,100	$24,967	7.8%	$27,804	$23,838	$20,182	$23,535	10.1%	$24,900	$23,000	$20,000
Science and mathematics															
Professor	$29,874	8.6%	$33,500	$29,927	$25,038	$32,336	7.2%	$36,000	$30,475	$27,000	$29,403	11.1%	$35,500	$29,564	$22,900
Associate professor	24,317	8.9%	25,200	22,500	19,950	24,936	8.1%	27,450	24,914	22,774	23,023	12.7%	24,000	21,950	18,800
Assistant professor	20,340	10.0%	21,500	18,550	16,848	19,964	9.4%	20,566	19,000	17,600	21,204	11.6%	22,500	18,400	16,400
All ranks (f)	25,671	8.7%	29,564	23,700	19,450	26,912	7.9%	31,000	26,550	22,500	25,118	11.6%	29,025	22,500	18,456
Social sciences															
Professor	$29,700	8.4%	$35,350	$30,500	$24,900	$31,748	7.4%	$36,540	$31,711	$28,000	$30,783	8.7%	$34,000	$29,300	$21,378
Associate professor	23,661	8.8%	25,750	23,760	20,903	23,843	8.1%	25,271	24,000	22,000	24,674	10.1%	25,800	23,030	20,300
Assistant professor	19,759	8.0%	20,200	18,500	17,000	19,905	7.5%	21,964	19,500	18,039	19,211	8.8%	20,050	18,000	17,000
All ranks (f)	24,611	8.3%	28,000	23,306	19,000	26,077	7.7%	30,732	24,900	22,000	24,483	9.4%	26,000	21,000	17,725
Vocational education (h)															
Professor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Associate professor	$23,368	8.8%	$24,707	$23,000	$21,000	—	—	—	—	—	—	—	—	—	—
Assistant professor	19,847	8.4%	21,000	19,000	17,000	$20,643	6.1%	$22,203	$20,426	$18,600	$18,599	11.7%	$19,210	$17,975	$17,000
All ranks (f)	22,460	8.3%	23,709	19,600	17,168	23,812	6.3%	25,195	22,350	18,642	20,335	10.8%	19,600	18,350	16,800

	All 4-year institutions					Public 2-year institutions					All public institutions				
	Average (a)	Change (b)	High (c)	Median (d)	Low (e)	Average (a)	Change (b)	High (c)	Median (d)	Low (e)	Average (a)	Change (b)	High (c)	Median (d)	Low (e)
Arts, fine and applied															
Professor	$30,478	7.0%	$34,851	$27,900	$24,250	—	—	—	—	—	$29,576	7.3%	$35,621	$30,000	$27,100
Associate professor	24,052	9.6%	26,174	22,500	21,000	—	—	—	—	—	23,430	8.4%	25,500	23,400	20,981
Assistant professor	19,762	7.7%	20,300	18,200	16,300	—	—	—	—	—	18,943	7.8%	21,100	19,600	17,600
All ranks (f)	25,051	8.1%	27,542	21,675	18,200	—	—	—	—	—	23,053	7.6%	27,242	22,261	19,100
Business and economics															
Professor	$33,543	10.6%	$43,000	$36,670	$31,000	—	—	—	—	—	$31,230	12.1%	$37,315	$30,500	$28,000
Associate professor	27,428	10.9%	31,000	27,815	24,400	—	—	—	—	—	25,573	10.8%	29,292	25,935	21,500
Assistant professor	23,564	10.4%	24,960	21,000	19,500	—	—	—	—	—	23,372	10.7%	24,410	22,000	19,850
All ranks (f)	28,272	10.9%	34,000	28,000	21,500	$21,942	11.1%	$23,900	$20,723	$18,950	26,558	11.0%	30,500	26,508	21,500
Engineering and computer science															
Professor	$34,229	9.9%	$39,900	$36,500	$31,800	—	—	—	—	—	$32,491	10.2%	$39,800	$35,000	$30,750
Associate professor	27,270	11.4%	30,000	27,000	24,240	—	—	—	—	—	26,976	9.6%	30,650	27,000	24,740
Assistant professor	24,321	12.6%	26,250	25,000	22,000	—	—	—	—	—	—	—	—	—	—
All ranks (f)	29,026	10.9%	37,000	30,300	26,000	—	—	—	—	—	26,968	9.3%	34,700	30,000	25,500
Humanities (g)															
Professor	$31,000	8.5%	$33,500	$28,600	$25,200	—	—	—	—	—	$29,583	7.7%	$36,000	$31,500	$26,587
Associate professor	23,187	9.9%	24,475	22,600	20,331	—	—	—	—	—	24,042	8.9%	24,700	23,900	22,000
Assistant professor	18,692	8.1%	19,362	17,954	15,500	—	—	—	—	—	19,690	8.3%	21,730	19,200	18,000
All ranks (f)	24,589	8.7%	27,196	22,580	18,225	$21,740	8.9%	$24,225	$21,490	$19,000	24,050	8.3%	27,500	23,405	19,524
Physical education															
Professor	$29,501	8.9%	$31,063	$27,330	$25,000	—	—	—	—	—	—	—	—	—	—
Associate professor	24,347	8.5%	27,710	24,000	23,000	—	—	—	—	—	—	—	—	—	—
Assistant professor	19,694	9.0%	20,915	20,000	17,742	—	—	—	—	—	—	—	—	—	—
All ranks (f)	24,492	8.5%	27,000	23,395	20,000	—	—	—	—	—	$24,655	7.8%	$27,815	$23,815	$20,340
Science and mathematics															
Professor	$31,364	8.4%	$35,840	$30,000	$25,750	—	—	—	—	—	$30,048	7.7%	$35,870	$30,064	$26,550
Associate professor	24,302	9.5%	25,135	22,500	19,950	—	—	—	—	—	24,775	7.8%	27,100	24,400	22,055
Assistant professor	20,376	10.2%	21,500	18,500	16,700	—	—	—	—	—	20,035	9.4%	20,800	19,800	17,600
All ranks (f)	26,316	9.0%	29,600	23,700	19,350	$23,320	7.4%	$25,631	$22,215	$19,800	25,870	7.8%	30,064	25,650	21,490
Social sciences															
Professor	$31,428	7.8%	$35,500	$30,600	$25,000	—	—	—	—	—	$29,325	8.3%	$35,800	$31,455	$26,660
Associate professor	24,119	8.8%	25,750	24,000	20,903	—	—	—	—	—	23,305	8.3%	25,200	24,000	22,000
Assistant professor	19,675	7.9%	20,125	18,400	17,000	—	—	—	—	—	19,953	7.8%	21,851	19,500	18,000
All ranks (f)	25,548	8.2%	28,000	23,568	19,000	$21,191	8.4%	$23,800	$21,025	$18,750	24,660	7.9%	30,200	24,500	21,000
Vocational education (h)															
Professor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Associate professor	$23,485	7.9%	$24,900	$23,168	$19,000	—	—	—	—	—	$24,133	8.1%	$24,900	$23,932	$22,000
Assistant professor	19,965	7.8%	20,500	18,666	17,000	—	—	—	—	—	20,423	7.4%	22,000	20,207	18,600
All ranks (f)	22,658	7.6%	24,050	19,500	17,000	$21,744	11.0%	$22,675	$21,045	$19,400	23,212	7.6%	24,812	22,000	18,842

(a) Estimated mean, 9-month base salary for 1981-82. Does not include fringe benefits.
(b) Percentage change, average 1981-82 salary over average 1980-81 salary.
(c) One-fourth of the faculty members receive this amount or more.
(d) One-half of the faculty members receive this amount or more.
(e) One-fourth of the faculty members receive this amount or less.
(f) Includes instructors
(g) Includes language, literature, and communications.
(h) Includes home economics, health, and nursing.
— Indicates too few data for reliable estimate.

Note: Survey data are based on responses of 4,319 individuals, weighted to represent faculty members at colleges and universities of all types except law and medical schools, proprietary institutions, private two-year colleges, and colleges with fewer than 500 students. Faculty members in the group from which the sample was drawn were those who offered courses in the fall of 1980. Those hired for their first faculty jobs in the fall of 1981 were not included. Salary figures do not include the value of contributed services of members of religious orders or others. There is a 95-per-cent probability that the average salary figure for faculty members of all ranks at all institutions in business and economics is within $320 of the average found in the sample. For engineering and computer science, the comparable "95-per-cent confidence interval" is $161. Confidence intervals for other salary averages are included in a technical report on survey design and sampling statistics that will be available from John Minter Associates late in January. Specific questions may be addressed to John Minter Associates, P.O. Box 107, Boulder, Colo. 80306.

SOURCE: SURVEY FOR THE CHRONICLE BY JOHN MINTER ASSOCIATES

Survey Finds Little Interest in Reforming Master's Programs

LOS ANGELES

If job-hunting college graduates are often considered underqualified with a bachelor's degree but overqualified or misqualified with a doctorate, would they be better off having academe's "in between" degree—the master's?

Researchers who posed that question have found, to their surprise, that the answer is probably No—at least in terms of what most academic departments offering master's-degree programs are actually doing these days.

Based on a survey of the chairmen of about 1,500 such departments in 24 disciplines, the researchers concluded that, despite a dearth of appropriate job opportunities for many Ph.D. holders, most colleges and universities had failed to set any special goals for master's programs that might give degree recipients an edge in seeking employment outside higher education.

Instead, most institutions—particularly highly selective ones—were found to be sticking to a traditional view of the master's degree as a stepping stone to doctoral study and academic careers.

"We have not yet seen any leadership from the top in legitimizing a unique role for the master's degree," said Lewis C. Solmon, an education professor at the University of California at Los Angeles who directed the study for the Higher Education Research Institute here.

He pointed to suggestions that master's programs should be made more flexible, provide more interdisciplinary study, and offer greater opportunities for students to develop "specific knowledge and skills."

But the study found that few departments were moving in that direction. Those that were, moreover, tended to be relatively weak, nonselective, and hard-pressed to maintain their enrollments. In addition, their efforts to change did not seem to be improving their ability to attract top students, the survey indicated.

Most department chairmen agreed that their students enrolled in master's programs "for career advancement or work-related reasons," Mr. Solmon noted. Yet the survey indicated little successful "adaptation" by departments to meet those goals.

'Little New Hope' Offered

Even in the humanities, where the Ph.D. job market is "abysmal," the researcher said, 65 per cent of the chairmen still regarded preparation for the doctorate as a "very important goal." That was so despite findings that most students completing requirements for the master's regarded it as a "terminal" degree and did not move on to doctoral work right away, if at all.

"Perhaps new programs can be developed with new purposes for new clienteles," Mr. Solmon speculated. "But most existing master's programs appear to offer little new hope for students in their quest for personal growth or vocational success, or for institutions seeking to stem the budgetary and enrollment crunches already occurring."

A book based on the survey, which was conducted about a year and a half ago, is awaiting a publisher's approval, said Mr. Solmon, who is secretary-treasurer of the Higher Education Research Institute. His co-researchers were Ann S. Visconti, director of research and policy analysis at the American Society of Allied Health Professions, and Judith K. Lawrence, a research associate at the institute.

—ROBERT L. JACOBSON

Salaries Lag for Professors in Humanities

The average salary for faculty members on nine-month contracts in engineering and computer science this year is about 15 per cent larger than the average for those in the humanities, according to the Chronicle Survey.

Based on data from 4,319 individual faculty members, the survey found that the disciplines in which average salaries were highest also showed the largest percentage increases over last year.

In business and economics, for example, this year's average salary for faculty members of all ranks is $27,535, an increase of 11 per cent over last year's average. In physical education, the average is $23,976, an increase of 8.4 per cent.

Faculty salaries in business and economics have a greater range than those in engineering and computer science, the survey found.

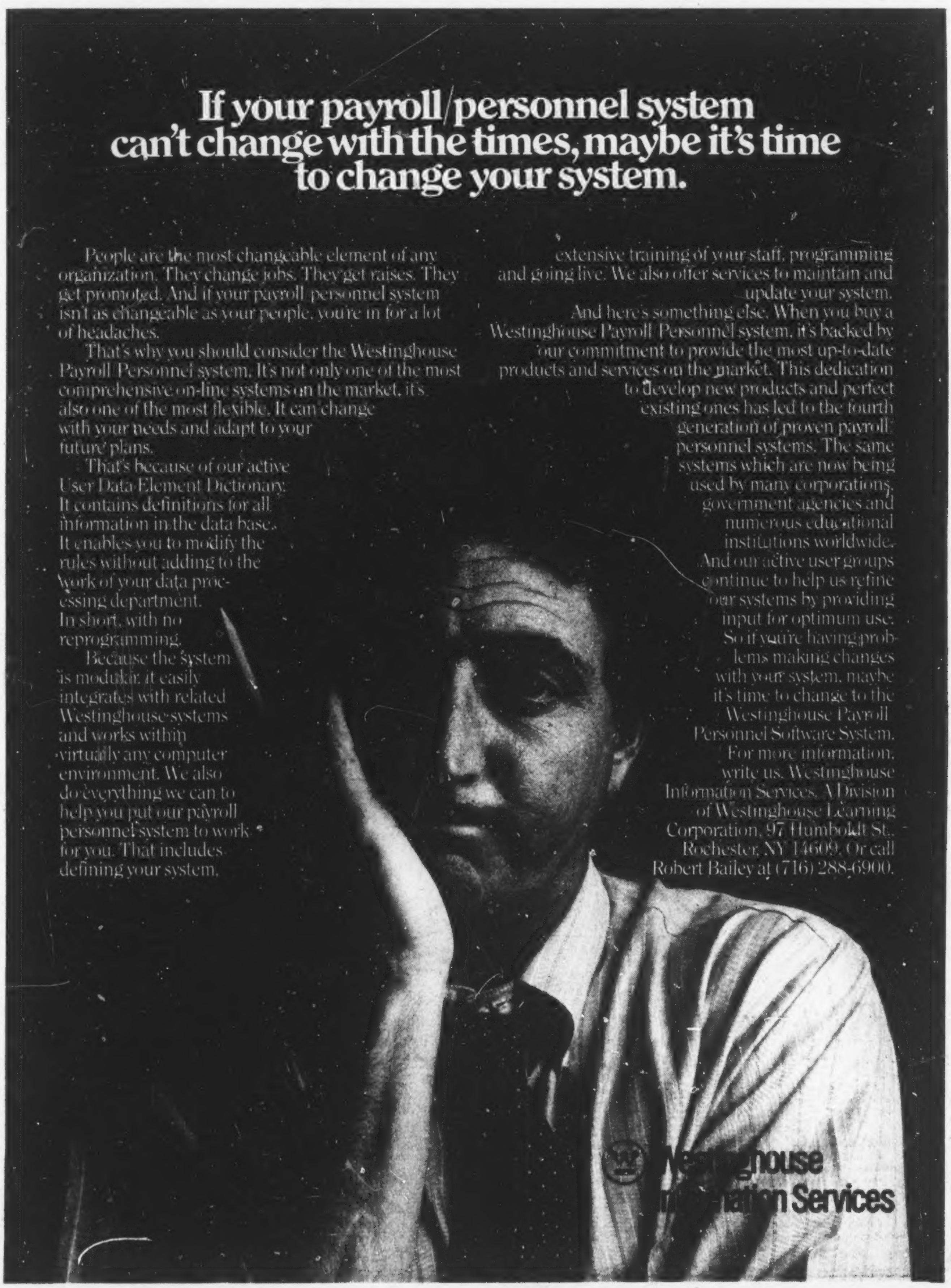
While the highest-paid 25 per cent of full professors in business and economics are making $42,250 or more this year, the lowest-paid 25 per cent of assistant professors in the same disciplines are getting $18,875 or less.

In engineering and computer science, the highest-paid 25 per cent of the full professors have salaries of $39,800 or more, and the lowest-paid 25 per cent of assistant professors receive $22,000 or less.

In the humanities, full professors at public institutions average $2,701 more than their counterparts in private institutions. In science and mathematics, the average salary for full professors is 10 per cent higher at public institutions.

The salary survey was conducted for *The Chronicle* by John Minter Associates, a Boulder, Colo., research organization that specializes in higher-education studies.

The survey data for faculty members in all disciplines (*The Chronicle*, November 11) show the average nine-month salary for all ranks, all types of institutions, is up 5.9 per cent, to an estimated $24,834.—JACK MAGARRELL



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States' Scholarship Programs Grow 10 Pct. in Year

Aid to students from state governments will total $963-milllion in 1981-82, survey indicates

HARRISBURG, PA.

State governments are expected to provide 10.3 per cent more aid to college students this year than in 1980-81, says the National Association of State Scholarship and Grant Programs.

Reviewing its annual survey of state scholarship programs, the association reported that state outlays for student aid would reach an estimated $963.6-million in 1981-82—up from the $873.8-million available last academic year.

The 10.3-per-cent increase projected for this year marks a signficant upturn from 1980-81, when state aid increased by only 1.6 per cent over the previous year.

Jerry S. Davis, director of research and policy at the Pennsylvania Higher Education Assistance Agency and co-author of the survey report, said he doubted the increase in state support represented a response to cuts in federal financial aid. Most state budgets were set before the extent of the reductions in federal programs became clear, he said.

While the overall increase projected for state aid approaches the 11-per-cent inflation rate for the past year, as measured by the Consumer Price Index, wide variations were found in the projected spending patterns of individual states. Of the 57 states and U.S. territories responding to the survey, 31 reported that they expected an increase in student aid for academic 1981-82, 19 reported little change, and 7 expected aid to be reduced by more than 1 per cent.

'Pretty Good News'

Mr. Davis said he was encouraged by the fact that fewer states faced losses of student aid this year than in 1980-81, when 19 experienced cutbacks.

"That's pretty good news," he said. "It perhaps does represent some strength of support for state aid programs."

The most severe losses for 1981-82 were expected in Alabama, where officials reported a 71.8-per-cent cut in scholarship funds—down from $1.4-million in 1980-81 to $400,000 this year. Under that sharply reduced budget, the state was able to award grants to only 2.5 per cent of the 53,396 students who applied for aid, the survey found.

Faced with steadily declining appropriations for scholarships over the last three years, the Alabama Commission on Higher Education has recommended that the grant program be eliminated entirely next year, said Thomas A. Roberson, the commission's associate director for student assistance. Mr. Roberson said the cost of administering the grants had become disproportionately high compared with the amount of money available for grants.

Even in states expecting some increase in aid this year, the boost has not been enough to meet the growing demand for financial assistance.

In Tennessee, where officials estimated that grant funds would be up by 10.7 per cent, scholarships were awarded to only 8,500 of the 30,920 students who applied, the survey found.

Although the federal government set up the State Student Incentive Grant program in 1974 to encourage states to begin new student-aid programs or to expand existing ones, this year's scholarship survey found that such support was still heavily concentrated in a few large states.

The report estimated that 88.5 per of all such aid this year would be awarded by only 16 states—with New York, Pennsylvania, Illinois, New Jersey, and California alone accounting for 62.2 per cent of the projected spending in 1981-82.

Dependent on Federal Funds

Many states with smaller programs were found to be heavily dependent on the federal funds provided under the incentive-grant program, in which grants are paid to states if they at least match the federal contribution. In 15 states, federal matching funds made up half the money spent in 1980-81.

Although Congress has provided $76.75-million for incentive grants for the current academic year, the Senate Appropriations Committee recently recommended eliminating federal funds for the program next year.

Ernest E. Smith, Jr., executive director of the Florida Student Financial Assistance Commission and president of the national state-scholarship association, predicted that if Congress were to end the program, some smaller state programs dependent on the matching funds would be eliminated entirely.

In an analysis of long-term trends in state student aid, the report noted a gradual increase in the share of state aid going to students attending private colleges and universities. Such students are expected to receive about 58 per cent of all state aid this year—compared with the 54-per-cent share they received in 1976-77.

In more than half the programs reporting such statistics, the survey found students at private colleges had received more than a third of the money distributed.

"When it is considered that only about one-fifth of the nation's college students are enrolled at private colleges, these students are receiving a disproportionate share of the state grant dollars," the report said. "The higher costs and consequent greater need at private colleges undoubtedly contribute to this phenomenon."

—JANET HOOK

State-College Heads Denounce Reagan's Education Stance

By ROBERT L. JACOBSON

COLORADO SPRINGS

Top officials of state-supported colleges and universities last week angrily accused the Reagan Administration of attempting to reverse a longstanding national commitment to equal opportunity and expanded access to higher education.

Some of the presidents, chancellors, and other officials attending the annual meeting of the American Association of State Colleges and Universities here also charged that the White House had failed to adopt an overall policy on higher education, that it didn't understand their institutions' needs, and that political and economic reality would soon disprove the Administration's claim that state governments could supply additional funds as the federal government pulled back.

A few of the state-college leaders defended the Administration and said higher education should expect to bear its share of the burden of reviving the economy.

However, most of the campus officials who spoke here said evidence was mounting that recession-strapped state governments would follow the federal government's example by curtailing tax support for public colleges and their students. In state after state, they said, unexpected shortfalls in tax revenues were prompting new cuts in appropriations already made for the current fiscal year, which began October 1.

Next year, they generally agreed, is likely to be worse.

FLORIDA ATLANTIC UNIVERSITY

Glenwood Creech, president of Florida Atlantic U.

Efforts to Increase Control

Some college leaders also voiced unease over signs that state legislatures and statewide higher-education agencies were seeking to exert more control over campus operations even as funds were being limited.

Anti-Administration sentiments were widely expressed at the meeting here, both in formal sessions and in informal conversations. They showed up most pointedly at a session where representatives of the Department of Education were besieged by hard questions from the audience about federal actions, and later at a session dealing with "Federal Relations in a Changed Environment."

The critics were most upset by portions of a speech prepared for delivery here by Education Secretary Terrel H. Bell and read by his executive assistant, Elam Hertzler. In addition to reaffirming cuts in federal spending for education, Mr. Bell made these points:

- ▶ Federal financial aid to students is intended "to meet student need, not to subsidize families" that spend their money on other things. The Administration's goal, said the Secretary, is to "return the primary responsibility for financing education where it belongs—to the parents and the student."
- ▶ Access to higher education, though a proper goal, "cannot be used as an excuse for lack of excellence."
- ▶ Colleges should raise their admissions standards and expectations of student achievement as a way of boosting academic quality and encouraging high schools to do the same.
- ▶ The creation of multicampus universities is a "well-intentioned but misguided attempt to achieve equality among unequals." Centrally controlled branch campuses of the state university system can threaten the quality of the main campus, Mr. Bell maintained.

'Economic Vandalism'

College and association officials at the meeting called the Secretary's speech "incredible," "ridiculous," and "dumb." They asked, for example, how they could be expected to improve educational quality with less money.

Allan W. Ostar, president of the association, called the Administration's budget cuts "sheer economic vandalism of our education system."

The Reagan Administration says a lot about the high cost of education, observed Benjamin H. Alexander, president of Chicago State University, but "little about the higher cost of ignorance."

President John P. Mellon of Western State College in Colorado challenged the Administration's advocacy of increased defense spending at the same time it was slashing funds for education.

"What could be more important than higher education or education generally in safeguarding the nation's security?" he asked.

NORTHEASTERN ILLINOIS UNIVERSITY

Ronald Williams, president of Northeastern Illinois U.

Ronald Williams, president of Northeastern Illinois University, declared that the Reagan Administration had no policy on higher education and "no sensitivity to what higher education is all about." He said that had become evident when he and other members of the association's board had met in September with Shannon Fairbanks, a senior White House adviser.

Mr. Williams warned that cuts in federal student aid were hurting the people "who look to us as perhaps the last avenue of economic mobility." He argued that state colleges, which enroll a high proportion of students from low-income families, were important both to the nation's social health and to its hopes for economic recovery.

Lawrence M. Stratton, president of Kutztown State College in Pennsylvania, suggested that, because of the recession, students who couldn't go to college because of financial-aid cuts might not be able to find jobs, either. The results, he said, could be a "national disaster."

Administration Defended

The Administration did not go undefended here, however.

Edward M. Elmendorf, Deputy Assistant Secretary of Education for student financial aid, said the Reagan plans would protect low-income students. They might not have access to "every institution," he conceded, but they would be able to go to at least one college.

Reduced federal grants to needy students would not cut enrollments, Mr. Elmendorf said, but would "change some of the attendance patterns."

Rodney H. Brady, president of Weber State College, chastised his colleagues for the way they criticized government officials and warned that their approach could be self-defeating.

Mr. Brady, who was Assistant Secretary for administration and management in the Department of Health, Education, and Welfare in the early 1970's, said academic leaders should "show respect for persons in positions of responsibility" in government. The officials are "more apt to listen and help people who are perceived as friends," he said.

Glenwood L. Creech, president of Florida Atlantic University, said he was "very distressed as a citizen" by some of the criticisms.

"It's obvious our country is in terrible financial straits," Mr. Creech said. "The thing I can't understand is why we think higher education shouldn't share in the cuts that are required to save the economy."

He said that "at least 20 to 30 per cent" of the students at his institution should not be there because they lacked the motivation or ability.

Cuts Could Bring 'Disaster,' Land-Grant Colleges Warn

WASHINGTON

Reduced spending for higher education by both the federal and state governments could produce "a national disaster even more damaging than our unpreparedness in science, technology, and education generally at the time the Soviet Union launched its Sputnik satellite in 1957."

That warning was delivered last week to President Reagan and Congressional leaders by the council of presidents of the National Association of State Universities and Land-Grant Colleges.

In a resolution passed unanimously and sent to the White House and Congress, the council said, "The President's economic-recovery program, as well as his call for an increased defense effort, can only be fulfilled by maintaining healthy universities that will continue to teach the nation's youth and conduct research at a level of quality which will assure our national economic revitalization and defense preparedness."

"It is essential that our universities receive adequate support to train young scientists, conduct basic research in all fields of human endeavor, participate in international educational exchanges and foreign-language training, and educate our nation's young, who must have reasonable financial assistance," they said.

The resolution was approved the day President Reagan, at a televised press conference, reaffirmed his intention to press for the 12-per-cent across-the-board budget cuts he had announced for education and other social programs in September.

—CHERYL M. FIELDS

FACT-FILE

Spending by States and Territories for Student Aid in 1981-82

	Number of awards			Dollars paid out			Average award		1981-82 * amount per capita
	1980-81	1981-82 *	Change	1980-81	1981-82 *	Change	1980-81	1981-82 *	
Alabama									
Student assistance	5,085	1,342	−73.6%	$1,427,000	$403,000	−71.8%	$ 281	$ 300	$ 0.11
Alaska									
Educational incentive grants	280	360	+28.6%	312,000	339,000	+ 8.7%	1,114	942	0.85
Arizona									
Incentive grants	2,494	3,325	+33.3%	1,639,000	2,483,000	+51.5%	657	747	0.91
Arkansas									
State scholarships	8,787	9,871	+12.3%	2,046,000	2,732,000	+33.5%	233	277	1.20
California									
State grants	62,597	61,909		84,783,000	87,088,000				
Bilingual teacher development	296	724		745,000	1,932,000				
Law enforcement personnel dependents	9	8		12,000	15,000				
All **California** programs	62,902	62,641	− 0.4%	85,540,000	89,035,000	+ 4.1%	1,360	1,421	3.76
Colorado									
Student incentive grants	3,200	not available		2,134,000	2,097,000				
Student grants	14,000	not available		4,230,000	5,193,000				
All **Colorado** programs	17,200	not available		6,364,000	7,290,000	+14.6%	370	424	2.52
Connecticut									
State scholarships	3,344	3,245		2,739,000	2,713,000				
Private college student contracts	4,906	4,927		4,450,000	4,435,000				
All **Connecticut** programs	8,250	8,172	− 0.9%	7,189,000	7,148,000	− 0.6%	871	875	2.30
Delaware									
Postsecondary scholarships	633	674	+ 6.5%	453,000	457,000	+ 0.9%	716	678	0.77
District of Columbia									
Incentive grants	719	* 850	+18.2%	789,000	1,116,000	+41.7%	1,097	1,315	1.75
Florida									
Student assistance grants	12,821	14,000	+ 9.2%	11,527,000	12,300,000	+ 6.7%	899	879	1.26
Georgia									
Incentive grants	12,778	12,000	− 6.1%	3,569,000	3,750,000	+ 5.1%	279	313	0.69
Hawaii									
Incentive grants	1,985	1,900	− 4.3%	516,000	736,000	+42.6%	260	387	0.76
Idaho									
Incentive grants	885	890	+ 0.6%	512,000	514,000	+ 0.4%	579	578	0.55
Illinois									
Monetary awards	89,216	95,000	+ 6.5%	85,573,000	91,696,000	+ 7.2%	959	965	8.03
Indiana									
State scholarships	12,485	12,676		12,789,000	6,927,000				
Educational grants	12,241	19,655		6,587,000	10,106,000				
Freedom-of-choice grants	6,927	8,157		3,879,000	4,255,000				
All **Indiana** programs	31,653	40,488	+27.9%	23,255,000	21,288,000	− 8.5%	735	526	3.88
Iowa									
Scholarships	1,262	1,220		684,000	668,000				
Tuition grants	9,585	9,650		14,015,000	14,133,000				
Vocational-technical tuition grants	2,750	2,850		825,000	859,000				
All **Iowa** programs	13,597	13,720	+ 0.9%	15,544,000	15,660,000	+ 0.7%	1,143	1,141	5.38
Kansas									
Scholarships	1,800	1,800		900,000	900,000				
Tuition grants	3,600	3,650		4,200,000	4,200,000				
All **Kansas** programs	5,400	5,450	+ 0.9%	5,100,000	5,100,000	0.0%	944	936	2.16
Kentucky									
State grants	4,158	3,937		3,246,000	3,307,000				
Incentive grants	13,197	11,775		3,381,000	3,273,000				
All **Kentucky** programs	17,355	15,712	− 9.5%	6,627,000	6,580,000	− 0.7%	382	419	1.80
Louisiana									
Incentive grants	2,163	3,974	+83.7%	1,062,000	2,186,000	+105.8%	491	550	0.52
Maine									
Incentive grants	4,309	800	− 81.4%	1,179,000	400,000	−66.1%	274	500	0.36
Maryland									
General state scholarships	5,138	5,000		3,044,000	3,100,000				
Senatorial grants	7,069	6,930		2,598,000	2,673,000				
Proprietary school grants	177	200		99,000	100,000				
All **Maryland** programs	12,384	12,130	− 2.1%	5,741,000	5,873,000	+ 2.3%	464	484	1.39
Massachusetts									
General scholarships	28,000	27,000	− 3.6%	16,365,000	16,500,000	+ 0.8%	584	611	2.88
Michigan									
Competitive scholarships	21,520	19,526		15,620,000	16,700,000				
Tuition grants	10,808	11,041		12,201,000	14,072,000				
All **Michigan** programs	32,328	30,567	− 5.4%	27,821,000	30,772,000	+10.6%	861	1,007	3.32
Minnesota									
Scholarships and grants	38,254	51,000	+ 33.3%	26,500,000	32,000,000	+20.8%	693	627	7.85
Mississippi									
Incentive grants	1,953	2,000	+ 2.4%	1,302,000	1,299,000	− 0.2%	667	650	0.52
Missouri									
Student grants	14,057	13,420	− 4.5%	9,317,000	9,178,000	− 6.5%	663	684	1.87
Montana									
Incentive grants	824	900	+ 9.2%	353,000	389,000	+10.2%	428	432	0.49
Nebraska									
Incentive grants	2,152	2,150	− 0.1%	1,196,000	1,101,000	− 7.9%	556	512	0.71
Nevada									
Incentive grants	441	450	− 2.0%	287,000	150,000	−47.7%	651	333	0.19
New Hampshire									
Incentive grants	1,523	not available		548,000	535,000				
Nursing education grants	107	100		47,000	40,000				
All **New Hampshire** programs	1,630	1,623	− 0.4%	585,000	575,000	− 3.4%	365	354	0.62

* Estimated.

Continued on Following Page

FACT-FILE—Continued

State Spending for Student Aid

	Number of awards			Dollars paid out			Average award		1981-82 * amount per capita
	1980-81	1981-82 *	Change	1980-81	1981-82 *	Change	1980-81	1981-82 *	
New Jersey									
Tuition aid	48,600	53,500		$29,633,000	$34,417,000				
Garden State scholarships	7,295	7,696		3,439,000	3,599,000				
Educational opportunity grants	11,255	11,503		8,207,000	6,133,000				
Competitive scholarships and incentive grants	3,400	900		2,370,000	635,000				
All **New Jersey** programs	70,550	73,599	+ 4.3%	43,649,000	44,784,000	+ 2.6%	619	608	6.08
New Mexico									
Incentive grants	1,500	1,500	0.0%	720,000	720,000	0.0%	480	480	0.55
New York									
Tuition assistance	297,393	329,000		245,507,000	276,450,000				
Regents scholarships **	60,619	65,445		15,155,000	16,361,000				
All **New York** programs	358,012	394,445	+10.2%	260,662,000	292,811,000	+12.3%	728	742	16.68
North Carolina									
Incentive grants	5,832	4,904		3,376,000	3,299,000				
Legislative tuition grants **	25,578	23,400		12,677,000	14,040,000				
Brooks Foundation scholarships	45	52		44,000	57,000				
Turrentine Foundation scholarships	276	282		274,000	310,000				
Suther scholarship fund	0	16		0	18,000				
All **North Carolina** programs	31,731	28,654	− 9.7%	16,371,000	17,724,000	+ 8.3%	516	619	3.02
North Dakota									
Tuition assistance grants	210	428		106,000	204,000				
Student assistance	1,263	1,200		479,000	498,000				
All **North Dakota** programs	1,473	1,628	+10.5%	585,000	702,000	+20.0%	397	431	1.08
Ohio									
Instructional grants	58,657	68,011	+15.9%	27,402,000	40 812,000	+48.9%	467	600	3.78
Oklahoma									
Incentive grants	8,454	8,500	+ 0.5%	2,041,000	2,067,000	+ 1.3%	241	243	0.68
Oregon									
Need grants	12,611	14,300		5,814,000	7,205,000				
Cash awards	824	866		388,000	443,000				
Private scholarships	139	122		113,000	115,000				
Foreign student fee remission	212	154		345,000	252,000				
All **Oregon** programs	13,786	15,442	+ 12.0%	6,660,000	8,015,000	+20.3%	483	519	3.04
Pennsylvania									
Higher education grants	121,712	131,255	+ 7.8%	79,879,000	82,226,000	+ 2.9%	656	626	6.93
Rhode Island									
Scholarships and grants	6,459	9,000	+39.3%	4,616,000	6,500,000	+40.8%	715	722	6.86
South Carolina									
Tuition grants	8,461	8,000	− 5.4%	11,069,000	13,388,000	+21.0%	1,308	1,674	4.29
South Dakota									
Incentive grants	682	470	−31.1%	427,000	431,000	+ 0.9%	626	917	0.62
Tennessee									
Student assistance awards	9,001	8,500	− 5.6%	6,475,000	7,169,000	+10.7%	719	843	1.56
Texas									
Tuition equalization grants	16,905	17,480		11,892,000	15,698,000				
Public education grants	4,952	6,000		1,089,000	3,264,000				
All **Texas** programs	21,857	23,480	+ 7.4%	12,981,000	18,962,000	+46.1%	594	808	1.33
Utah									
Incentive grants	3,000	not available		1,504,000	not available		505	not available	1.03
Vermont									
Incentive grants	6,600	7,840	+18.8%	4,875,000	5,537,000	+13.6%	739	706	10.83
Virginia									
Scholarship assistance	15,451	20,000		3,829,000	3,800,000				
Tuition assistance grants **	12,271	12,200		7,225,000	8,540,000				
All **Virginia** programs	27,722	32,200	+16.2%	11,054,000	12,340,000	+11.6%	399	383	2.30
Washington									
Need grants	9,380	13,134	+40.0%	4,677,000	7,768,000	+66.1%	499	591	1.88
West Virginia									
Higher education grants	5,104	6,500	+27.4%	3,012,000	4,422,000	+46.8%	590	730	2.27
Wisconsin									
Tuition grants	8,380	7,900		10,033,000	10,783,000				
Higher education grants	30,848	35,000		10,526,000	11,400,000				
Indian student grants	1,004	1,078		838,000	882,000				
All **Wisconsin** programs	40,232	43,978	+ 9.3%	21,397,000	23,065,000	+ 7.8%	532	524	4.90
Wyoming									
Incentive grants	56	250	+346.4%	52,000	100,000	+92.3%	929	400	0.21
American Samoa									
Scholarships	162	162	0.0%	719,000	719,000	0.0%	4,438	4,438	—
Guam									
Professional/technical awards	60	not available		235,000	not available		3,917	not available	—
Northern Marianas									
Grants	360	not available		500,000	not available		1,389	not available	—
Puerto Rico									
Incentive grants	1,940	not available		1,458,000	not available		752	not available	—
Trust Territory									
Scholarships and grants	1,000	not available		505,000	not available		505	not available	—
Virgin Island									
Territorial grants	47	not available		80,000	not available				
Incentive grants	19	not available		24,000	not available				
All **Virgin Islands** programs	66	not available		104,000	not available		1,576	1,576	—
All need-based programs	1,140,084	1,231,538	+ 8.0%	**$838,772,000**	**$924,681,000**	+10.3%	**$735**	**$751**	**$4.08**
Other programs	98,468	101,045		35,057,000	38,941,000				
All programs	1,238,552	1,332,583	+ 7.6%	**$873,829,000**	**$963,622,000**	**+10.3%**	**$705**	**$723**	**$4.25**

* Estimated.

**Program not based upon need. Appears here because it was included in last year's report.

SOURCE: NATIONAL ASSOCIATION OF STATE SCHOLARSHIP AND GRANT PROGRAMS

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News Summary

Articles on inside pages

Despite his "pseudo-retirement" 30 years ago, the University of California chemist Joel H. Hildebrand continues his scholarly contributions at the age of 100. Story on Page 3.

Students from Gallaudet College interpret "America the Beautiful" through dance. Photo story on Pages 5-7.

Salaries of female faculty members average 85 per cent of those that male academics receive, the Chronicle Survey finds. Story and table on Page 8.

A faculty union in New Jersey is challenging the state higher-education board's rules for "reductions in force" at public colleges. Story on Page 9.

Freshman enrollment at private colleges and universities is down, but overall enrollment at the institutions is up by 1.1 per cent over last fall, new estimates show. Story and Fact-File on Page 10.

Campus convocations on the danger of nuclear war are being spearheaded by the Union of Concerned Scientists. Story on Page 11.

President Reagan has named a conservative Republican to chair the U.S. Commission on Civil Rights. Story on Page 17.

Civil-rights groups hope to head off a proposal in Congress to consolidate the enforcement of equal-opportunity laws. Story on Page 17.

The seasonal activities of the Easter Bunny and the dangers posed by the weight of accumulated *National Geographic* magazines provide grist for the *Journal of Irreproducible Results*. Story on Page 23.

Junior faculty members and students will again participate in the governing councils of French universities. Story on Page 21.

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NIH, Beset by Budget Uncertainties, to Cut 12 Pct. from Research Projects

Agency complying with Reagan's order to lower spending until Congress acts on funds

By **JANET HOOK**

WASHINGTON

More than 1,300 biomedical researchers scheduled to receive grants from the National Institutes of Health next month have been told that they will get about 12 per cent less money than they expected.

The agency has decided to cut support for continuing research projects and make fewer new grants—at least until Congress decides how much money it will finally provide for the health institutes in the fiscal year that began October 1.

The decision to cut spending affects only grants scheduled to be made in December. The move could be reversed if an appropriations bill were enacted that provided more money for the institutes than the $3.3-billion President Reagan has requested.

However, if uncertainty about the institutes' final budget is not resolved quickly, N.I.H. officials say, similar reductions will be made in spending for grants in January and possibly in subsequent months.

Case-by-Case Decisions

Most immediately affected by the cutback are 1,384 recipients of multiyear N.I.H. grants who are due to receive an annual installment of funds on December 1.

Although many such researchers were given tentative notices earlier this year of how much money they would receive, the institutes have now said that such continuing grants will be cut by 12 per cent.

William F. Raub, associate director of N.I.H. for extramural research and training, said the exact amount to be cut from each grant would be determined on a case-by-case basis.

"It is neither practical nor sensible to reduce every grant 12 per cent," Mr. Raub said. "In some cases, there may be compelling reasons to make less than a 12-per-cent cut. In others, there may be good reason to cut more."

The institutes have trimmed their grants to comply with a White House order, issued last month, that requires federal agencies to keep spending down to the levels recommended by President Reagan when he called for a 12-per-cent across-the-board reduction in his 1982 budget request for all nondefense programs. That spending level was mandated even though, for most programs, Congress had provided more money for the programs in a continu-

Continued on Page 19, Column 1

Appeals Court Rejects 'Academic Freedom' as Professor's Defense in Tenure-Vote Case

ATLANTA

Academic freedom does not entitle faculty members to refuse to testify in court about their involvement in tenure decisions, a federal appeals court ruled here last week.

The decision, handed down by a three-judge panel of the U.S. Court of Appeals for the Eleventh Circuit, held that the right to academic freedom is limited by "other important societal goals" and that it "cannot be used to give an institution of higher learning *carte blanche* to practice discrimination."

The unanimous decision upheld a lower court's ruling that sent James A. Dinnan, a University of Georgia professor of adult education and reading, to jail for three months last year.

In another case this month, a federal district judge in New York issued a decision that was the opposite of the Eleventh Circuit's. Judge Lawrence W. Pierce said that secrecy of votes is essential to preserving academic freedom.

Mr. Dinnan attracted national attention in July, 1980, when he surrendered to prison authorities in his academic regalia, announcing that he was going to jail in defense of the principles of academic freedom. He had been held in contempt of court by Judge Wilbur D. Owens after refusing to comply with the judge's order to

Continued on Page 14, Column 1

The text of the appeals court's decision appears on Pages 14 and 15.

WIDE WORLD

James A. Dinnan

Colleges Urged to Combat 'Civic Illiteracy'

By **MALCOLM G. SCULLY**

WASHINGTON

American colleges and universities must develop programs for undergraduates and adults "to combat growing illiteracy about public issues," says a report by Ernest L. Boyer, president of the Carnegie Foundation for the Advancement of Teaching, and Fred M. Hechinger, president of the New York Times Foundation.

"As a nation, we are becoming civically illiterate," Mr. Boyer and Mr. Hechinger write in *Higher Education in the Nation's Service*, which was released this week.

"Unless we find better ways to educate ourselves *as citizens*, we run the risk of drifting unwittingly into a new kind of Dark Age—a time when small cadres of specialists will control knowledge and thus control the decision-making process. These high priests of technology will understand, or claim to understand, the complicated issues, telling us what we should believe and how we should act. In this new age of growing confusion, citizens would make critical decisions not on the basis of what they know, but on the basis of blind faith in one or another set of professed experts."

As an antidote to civic illiteracy, they say, "the tired old academic workhorse 'civics' must be updated and restored in the curriculum to what was once an honored place."

For undergraduates, "we believe civic understanding can be increased through courses ranging from literature and art to nuclear physics and industrial engineering. A better grounding in rhetoric and logic,

Continued on Page 12, Column 1

An excerpt from the Carnegie Foundation's report appears on Pages 12 and 13.

40,000 Freshman Chemistry Students Later, Berkeley's Hildebrand Celebrates 100 Years

BERKELEY, CAL.

While most of his contemporaries have long since ended their scholarly publishing careers, Joel H. Hildebrand continues to make major contributions to chemistry—at the age of 100.

Mr. Hildebrand, professor emeritus of chemistry at the University of California at Berkeley, became a centenarian last week, and the day did not pass unnoticed on the campus where he taught from 1913 to 1952.

Congratulatory letters and citations from President Reagan, the National Academy of Sciences, and the National Science Board were among the tributes Mr. Hildebrand received at a celebration attended by hundreds of scientists in front of Hildebrand Hall, the chemistry building that bears his name.

"To meet him," said David S. Saxon, president of the University of California, in a birthday message, "is to realize immediately that you are in the presence of a man for whom the laws of nature are not constraints, but milestones pointing the way to new achievements."

"Ever since he came here almost 70 years ago," said Ira Michael Heyman, chancellor at Berkeley, "Joel Hildebrand has made a deep and lasting impression on the Berkeley campus, and especially on the 40,000 students who were fortunate enough to take freshman chemistry from him.

"He has set the mark for what it means to be a dedicated scholar and teacher."

UNIVERSITY OF CALIFORNIA, BERKELEY

More than half of Joel H. Hildebrand's publications have appeared since his "retirement" in 1952. Yes, 1952.

Milestone in High School

Mr. Hildebrand, who maintains an office on the campus, continues to publish papers on his specialty, the chemistry of liquids. As he is fond of pointing out, more than half of his publications have appeared since his "retirement" in 1952. His most recent paper, on the state of hydrogen in liquid metals, was published this year.

While in high school, Mr. Hildebrand demonstrated that the correct chemical formula for nitric oxide was NO, not N_2O_2 as was stated in a chemistry text.

"That experiment was a milestone in my career," he says. "It demonstrated that even a lad in high school could, by a well-reasoned experiment, demolish a theory asserted in a pretentious book by a Harvard professor."

Later, as a research chemist, he published brilliant papers on the chemistry of solutions, which included work that helped change the mixture of gases used by deep-sea divers to prevent the often fatal "bends."

He also served as dean of men, dean of letters and science, and dean of chemistry at Berkeley.

Students and colleagues of Mr. Hildebrand say he was a popular lecturer who, when he reached the mandatory retirement age of 70, objected to being forced to stop teaching undergraduates. He proposed that a better way of determining when a professor ought to retire would be to see how many of his or her students were awake after 15 minutes of the lecture.

Despite what he calls his "pseudo-retirement," he has remained active in research on the campus. Ten years ago, when he was 90, students would regularly see him bound up the stairs to his office.

"Twenty years ago I attained the age when, at nearly any other university, I would have been evicted as at least theoretically senile," he wrote in 1972. "But I was given one of the best offices in Latimer Hall and allowed to keep my laboratory in Lewis Hall. It is now in Hildebrand Hall, the most beautiful building on the campus. The regents got tired of waiting for me to die before naming it."

A Love of the Outdoors

Mr. Hildebrand continues to live near the Berkeley campus with his wife of 73 years, Emily, who is 95. He has three sons, a daughter, 12 grandchildren, and 13 great-grandchildren, some of whom helped him blow out the 100 candles on his birthday cake.

One of his sons, Milton, a professor of zoology at the University of California's Davis campus, told the 500 guests at last week's convocation that his father had instilled in all of his children a love of the outdoors.

The elder Mr. Hildebrand was president of the Sierra Club from 1937 to 1939, an avid hiker and skier, and a manager of the U.S. Olympic ski team.

He celebrated his seventy-seventh birthday by swimming a half mile in 22 minutes.

"I used swim fins and webbed gloves," Mr. Hildebrand said soon after, "because a man of intelligence should apply his power efficiently, not just churn the water."

"I used to be a pretty good skier, but my legs no longer obey me very well," he said more recently. "I am probably dying from my feet upward, which is better than starting at the top."

Skiing and Education

Mr. Hildebrand, a prolific writer, has published books on skiing, camping, and hiking—as well as a book of whimsical verse entitled *The Lowdown on Higher Education.*

Among his observations on higher learning:

▶ "A university should be primarily not a place of compulsions but one of opportunities."

▶ "Freshmen . . . are more dependent upon good teaching than at any later period. It is, therefore, more of a challenge to teach at this stage and more of an art to do it well."

▶ "The discovery of truth and its transmission to others belong together, and their joint exercise can afford satisfactions greater than either one practiced by itself."

For his accomplishments, the University of California last week presented Mr. Hildebrand with the Berkeley Medal, a new award of which he is the first recipient. A $250,000 endowment for the Joel H. Hildebrand chair in the university's college of chemistry was also established by the Standard Oil Company of California.

"While contributing to the advancement of science . . . he established a reputation as a science teacher *par excellence,*" wrote George C. Pimental and Kenneth S. Pitzer, professors of chemistry at Berkeley, in an editorial in a recent issue of *Science* magazine.

At a time when federal support for science education is waning, they said, Mr. Hildebrand's ideas and enthusiasm for teaching science "should be remembered."

"Putting them into practice is a fitting way to wish Joel Hildebrand a happy hundredth birthday," they said. —KIM MC DONALD

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payments to an unspecified number of former students who withdrew from its correspondence courses in recent years.

The commission charged that the institution, a subsidiary of Macmillan Inc., the publishing company, misled students by basing its refund policy on the completion of "lesson assignments" without making clear that most of those would be finished at the beginning of a course.

The publisher said in a statement that both it and LaSalle "vigorously deny" the charges. In addition, Barry J. Cutler, a lawyer for the school and a former assistant general counsel at the F.T.C., called the complaint "almost incomprehensible as to what [the] theory is and who got hurt."

The commission, which ordered LaSalle to revise its policy last year, said it had filed suit after negotiations had failed to produce an agreement.

▪ Most Companies Provide Aid for Continuing Education

About 90 per cent of the country's major business and industrial companies provide tuition-aid plans for their professional employees, and about 80 per cent offer the same benefit for production workers, according to a survey by the Conference Board, an economic-research organization in New York.

The survey found that 75 per cent of the companies require that continuing-education courses be related to employees' work to qualify for tuition aid.

About 5 per cent of professional employees and 3 per cent of production workers take advantage of the tuition-aid programs, according to the survey, which included more than 6,000 companies in the banking, insurance, manufacturing, retailing, and utilities industries.

▪ Corrections

▶ Because of a typographical error, a story on the scholarly study of science fiction in *The Chronicle*, November 11, overestimated the anticipated sales of a series of books on science-fiction writers published by Oxford University Press. Oxford expects each volume in the series to sell 10,000, not 100,000, copies in paperback in its first year.

▶ A Fact-File in the *The Chronicle*, November 4, on the number of adult-education registrations by subject area in 1979-80 gave the total for foreign languages as 52,493. The correct total is 152,493.

Notes on . . .
Affirmative Action

"Most students would not be covered by Title IX for most . . . of their college experience" under a bill introduced by Sen. Orrin G. Hatch, Republican of Utah, to narrow the scope of Title IX of the Education Amendments of 1972. That is the conclusion of an analysis of the measure by the Project on the Status and Education of Women of the Association of American Colleges.

Under S. 1361, Title IX—which bars sex bias in federally assisted education programs or activities—would apply only to programs that receive direct federal aid. "Programs which receive direct funding are usually highly specialized (*e.g.*, vocational education, remedial programs for disadvantaged students) and involve only a very small number of college students," according to the analysis.

Under Senator Hatch's bill, "only the few students who are involved in these special programs would be protected by Title IX and assured a nondiscriminatory environment," it said.

"Programs that did not receive federal assistance could restrict the admission of women. For example, a program to train computer specialists could limit (or exempt) women for any reason whatsoever, such as believing that women were not as good in math as men."

Copies of the analysis cost $1 and are available from the Project on the Status and Education of Women, Association of American Colleges, 1818 R Street, N.W., Washington 20009.

▪

The regents of the University of Michigan have passed a resolution saying that despite Senator Hatch's bill, and despite proposals by the Department of Labor to narrow the affirmative-action requirements for recipients of federal contracts, they "reaffirm their commitment to principles of nondiscrimination in intercollegiate athletic programs, as well as in other activities."

Harold T. Shapiro, president of the university, told deans and other university administrators, "I am determined that the university will continue its firm commitment to affirmative action and equal opportunity regardless of the apparent pullback in these areas on the part of the federal government."

Noting the tight fiscal situation at the university, Mr. Shapiro added, "Since we will have fewer hiring opportunities, every opportunity we have must be approached as a unique chance to live up to the university's affirmative-action goals."

▪

The council of the American Historical Association has approved *Guidelines on Hiring Women Historians in Academia,* designed to help history departments "measure their progress in providing equity for women historians."

Drafted by the organization's Committee on Women Historians, the guidelines recommend that since women make up 25 per cent of those holding Ph.D.'s in history, "at least every fourth full-time tenure-track history appointment in U.S. colleges should go to a woman."

A second recommendation is that "over the next five years at least every fourth grant of tenure by history departments should go to a woman." Even if departments met this goal, the guidelines noted, it "would produce a very modest increase, to about one-eighth women among all tenured historians by 1986."

—CHERYL M. FIELDS

CHRONICLE SURVEY

Men's and Women's 1981-82 Salaries Compared

	Public Institutions				Private Institutions				All Institutions			
	Average[1]	Increase[2]	High[3]	Low[4]	Average[1]	Increase[2]	High[3]	Low[4]	Average[1]	Increase[2]	High[3]	Low[4]
Ph.D.-granting universities												
Men	$28,542	8.3%	$34,000	$22,250	$31,343	10.6%	$38,535	$25,800	$29,290	9.0%	$36,050	$23,700
Women	23,012	8.0%	25,650	18,842	25,857	9.1%	30,000	19,000	23,772	8.3%	28,000	19,000
Institutions granting other graduate degrees												
Men	$25,832	8.0%	$30,400	$22,000	$24,707	10.3%	$28,600	$19,500	$25,529	8.6%	$29,100	$20,790
Women	21,457	8.7%	24,100	17,280	20,289	11.3%	22,280	17,900	21,143	9.4%	23,423	17,700
Institutions granting only bachelor's degrees												
Men	—	—	—	—	$21,296	9.6%	$24,400	$17,000	$21,296	9.6%	$25,000	$17,100
Women	—	—	—	—	18,990	10.6%	20,300	15,650	18,890	10.6%	20,300	15,650
2-year colleges												
Men	—	—	—	—	—	—	—	—	$22,478	9.3%	$24,500	$19,000
Women	—	—	—	—					21,499	8.4%	22,718	18,165
All institutions[5]												
Men	$27,041	8.2%	$31,711	$22,165	$25,980	10.3%	$30,050	$18,800	$25,783	8.9%	$30,400	$20,000
Women	22,151	8.4%	24,814	18,000	21,742	10.3%	22,600	16,500	21,904	8.9%	24,000	17,200

Comparisons by Discipline

	Women	Men
Arts (a)		
Average salary[1]	$18,610	$25,290
Increase[2]	8.3%	8.0%
High[3]	$20,500	$27,900
Low[4]	13,500	19,100
Business (b)		
Average salary[1]	$25,065	$27,284
Increase[2]	12.6%	10.5%
High[3]	$28,000	$34,000
Low[4]	20,286	21,000

	Women	Men
Engineering (c)		
Average salary[1]	$24,596	$28,700
Increase[2]	9.9%	10.5%
High[3]	—	$37,000
Low[4]	—	26,000
Humanities (d)		
Average salary[1]	$21,337	$24,892
Increase[2]	9.1%	8.6%
High[3]	$24,500	$27,413
Low[4]	16.282	19,000

	Women	Men
Physical education(e)		
Average salary[1]	$23,006	$24,530
Increase[2]	7.8%	8.7%
High[3]	$24,655	$27,160
Low[4]	18,720	20,100
Science (f)		
Average salary[1]	$21,422	$27,004
Increase[2]	8.1%	9.0%
High[3]	$22,500	$30,000
Low[4]	16,500	20,532

	Women	Men
Social sciences (g)		
Average salary[1]	$21,494	$25,626
Increase[2]	7.3%	8.6%
High[3]	$24,800	$29,975
Low[4]	19,000	18,800
Vocational education (h)		
Average salary[1]	$21,008	$23,111
Increase[2]	9.5%	7.5%
High[3]	$22,350	$25,338
Low[4]	17,000	19,400

— Indicates insufficient data for reliable estimate.

[1] Estimated mean salary, not including fringe benefits, of full-time faculty members on nine-month contracts.

[2] Percentage increase, average 1981-82 salary over average 1980-81 salary.

[3] A fourth of faculty members received more than this amount.

[4] A fourth of faculty members received less than this amount.

[5] Does not include institutions where faculty members do not have academic ranks.

(a) Includes applied and fine arts, architecture, art history, cinema, dance, music, and theater.

(b) Includes accounting, business administration and management, business law, economics, finance, hospital administration, and marketing.

(c) Includes computer science.

(d) Includes classics, English, foreign languages, journalism, linguistics, literature, linguistics, philosophy, radio and television, religion, speech, and writing.

(e) Includes coaching, exercise physiology, movement science, and recreation.

(f) Includes astronomy, biology, biochemistry, biophysics, botany, chemistry, earth sciences, environmental science, forestry, geology, meteorology, pharmacy, physics, physiology, statistics, and zoology.

(g) Includes anthropology, child development, clinical psychology, elementary and secondary education, educational psychology, educational administration, geography, government, history, political science, psychology, sociology, and social work.

(h) Includes agriculture, drafting, electronic and engineering technology, family relations, food science, health and safety, health professions other than nursing, human ecology, nutrition, occupational therapy, physical therapy, public health, and textiles.

Note: Survey data are based on responses of 4,319 individuals, weighted to represent faculty members at colleges and universities of all types except law and medical schools, proprietary institutions, private two-year colleges, and colleges with fewer than 500 students. Faculty members in the group from which the sample was drawn offered courses in the fall of 1980; those hired for their first faculty jobs in the fall of 1981 were not included. Salary figures do not include the value of contributed services of members of religious orders or others. There is a 95-per-cent probability that the average salary figure for men at all institutions is within $320 of the average found in the sample. For women at all institutions, the comparable "95-per-cent confidence interval" is $466. Confidence intervals for other salary averages are included in a technical report on survey design and sampling statistics that will be available from John Minter Associates late in January. Specific questions may be addressed to John Minter Associates, P.O. Box 107, Boulder, Colo. 80306.

SOURCE: SURVEY FOR THE CHRONICLE BY JOHN MINTER ASSOCIATES

Female Professors Average 15 Pct. Less Pay Than Males

Women on college and university faculties this year are being paid, on the average, 85 per cent of what their male colleagues get, the Chronicle Survey has found.

The survey of faculty salaries for 1981-82 found that pay increases for both men and women averaged 8.9 per cent. A year ago, the Chronicle Survey found that women's average salaries had risen at a faster rate than men's: 9.6 per cent and 8.8 per cent, respectively.

This year's average salaries, estimated by the Chronicle Survey for faculty members of all ranks, are $25,783 for men and $21,904 for women. The averages are for full-time faculty members on nine-month contracts.

The greatest gap in average faculty salaries occurs in the arts and the sciences, the Survey shows. In the arts, the average salary for women this year is $18,610, which is only 74 per cent of the $25,290 average reported for men in the same disciplines. In the sciences, women average $21,422—79 per cent of the men's average of $27,004.

Women come the closest to matching men's salaries in physical education. Their average in that area is $23,006, which is 94 per cent of the men's average of $24,530.

The average salaries for women in other disciplines, according to Chronicle Survey estimates, equal 92 per cent of the men's average in business and economics; 91 per cent in vocational education; 86 per cent in engineering and in the humanities; and 84 per cent in the social sciences.

On the average, women received larger percentage increases than men at private colleges that offer only bachelor's degrees. At those institutions, the women's average this year is 10.6 per cent higher than last year's average, compared with an increase of 9.6 per cent for men in the same type of college.

Women's salaries increased by a larger percentage than men's at comprehensive colleges and universities, while men received the larger percentage increase at Ph.D.-granting universities and two-year colleges.

Data for the Chronicle Survey were obtained this fall from 4,319 individual faculty members and were weighted to represent faculty members at all colleges and universities except law and medical schools, proprietary institutions, private two-year colleges, and institutions with fewer than 500 students.

The survey was designed and conducted for *The Chronicle* by John Minter Associates of Boulder, Colo., an organization specializing in higher-education studies.—JACK MAGARRELL

Grand Jury Indicts President, 4 Others at 2-Year College

GARDEN CITY, N.Y.

Five employees of Nassau Community College, including the president and a vice-president, have been indicted by a county grand jury on charges of official misconduct and misusing funds.

All five have pleaded innocent to the charges, which followed a seven-month investigation by the Nassau County district attorney.

According to a spokesman for the college, the president, Robert R. Gwydir, has since begun "a sick leave of indeterminate duration" on the orders of his physician because of headaches and backaches that may be related to stress.

The college's trustees, who were scheduled to meet late last week, were expected to name an interim president from a list of candidates provided by the system office of the State University of New York. Nassau Community College, which has 22,000 students, is part of the state-university system.

Mr. Gwydir and Albert E. Donor, Jr., vice-president for policy, planning, and development, were charged with hiring relatives of college employees as teachers and administrators for a Comprehensive Employment and Training Act program operated by the college.

Among those hired in violation of CETA rules, the indictment says, was Mr. Gwydir's son, Mark. Also hired were the wife of the dean of evening and extension programs, the daughter of the CETA program administrator, and the daughter of an associate vice-president, according to the charges.

Mr. Donor, who is also an adjunct professor in the biology department, has also been charged with collecting $2,500 in pay for classes he allegedly never taught.

Others indicted were:

▶ Lawrence DellAquila, a former associate vice-president and director of the college's physical-education complex who is now a professor of physical education. He is accused of submitting falsified timecards. Mr. DellAquila was charged earlier this year with accepting an illegal consulting fee from the New York Arrows soccer team, which holds its practices in a campus building

▶ Henry Wendel, an associate professor of engineering, who is charged with illegally signing an agreement that allows the Nassau High School Hockey League to hold practices in another building on the campus, which is located on a former Air Force base. Mr. Wendel is secretary of the hockey league, a for-profit organization.

▶ George Paterson, an assistant in the college's public-relations office. He is accused of holding an $8,000-a-year post in the admissions office for which he did no work.

Because the indictments were returned only five days before elections for a number of county posts, some observers, including President Gwydir's lawyer, have said the charges may have been politically motivated.

"We are reasonably confident that everybody will be cleared of all the allegations," said Bob Allen, assistant to the president for college advancement. He characterized the charges as "fairly ridiculous."

—LAWRENCE BIEMILLER

FACT-FILE

Enrollment Changes at Private Institutions for Fall of 1981 Compared with Fall of 1980

	Freshman	Undergraduate	Professional	Graduate	Total
Type of Institution					
Research and Ph.D.-granting	− 9.1%	+ 0.8%	+ 1.2%	+ 0.8%	+ 0.8%
Comprehensive	− 1.3%	+ 1.4%	+ 2.9%	+ 1.9%	+ 1.1%
Selective liberal arts	− 2.1%	+ 10.0%	—	− 0.7%	− 0.7%
Less-selective liberal arts	− 1.2%	+ 4.8%	—	+ 4.2%	+ 0.8%
2 year	− 1.7%	− 7.9%	—	—	− 2.9%
Professional and specialized	+ 2.4%	+ 7.6%	+ 3.5%	+ 4.7%	+ 4.0%
Region					
North Central	− 4.6%	− 0.6%	+ 1.9%	− 0.3%	− 0.2%
Mid-Atlantic	− 1.2%	+ 5.0%	+ 2.1%	+ 3.3%	+ 1.0%
Northeast	+ 1.0%	+ 1.4%	+ 3.5%	+ 0.9%	+ 1.5%
South	− 3.8%	+ 7.6%	+ 4.7%	+ 5.4%	+ 2.3%
West, Southwest	− 0.7%	+ 1.0%	+ 1.4%	+ 3.0%	+ 1.4%
Total	**− 2.0%**	**+ 2.9%**	**+ 2.8%**	**+ 1.9%**	**+ 1.1%**

Note: Based on data from 634 colleges and universities, weighted to represent enrollment in all private institutions.

SOURCE: NATIONAL INSTITUTE OF INDEPENDENT COLLEGES AND UNIVERSITIES

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Freshman Rolls Drop 2 Pct. at Independent Colleges

By **JACK MAGARRELL**

WASHINGTON

Freshman classes at private colleges and universities are about 2 per cent smaller this fall than they were a year ago, according to estimates by the National Institute of Independent Colleges and Universities.

The estimates, based on data from 634 institutions, indicate that total enrollment on the private campuses this fall is 1.1 per cent higher than it was last fall.

Combined enrollment at both private and public institutions is up an estimated 1.6 per cent this fall, according to an earlier report based on data from more than 1,000 colleges and universities.

The overall-enrollment study, by the University of Alabama and the American College Testing Program (*The Chronicle*, November 4), found the largest increases at two-year colleges, most of which are public, and among students enrolled on a part-time basis.

The survey of private colleges by the National Institute of Independent Colleges and Universities did not distinguish between full-time and part-time students.

Uncertainty About Aid

Officials of the institute said the survey indicated that "uncertainty about student aid clearly affected freshman enrollment."

"Should this trend continue for more than a year," they said, "independent colleges and universities could be in danger of losing their share of future pools of students."

The N.I.I.C.U. study shows differences in enrollment by level of study and geographical region.

The most noticeable declines in enrollment were in the North Central region, where states have been strongly affected by adverse conditions in the auto industry.

Enrollment of first-year students at private institutions in the North Central states was down 4.6 per cent from last fall, the N.I.I.C.U. estimated, and total private-college enrollment in the region was down 0.2 per cent.

The Northeast was the only region reporting an increase in enrollment of first-year students—up 1 per cent, according to the private-college study. First-year enrollment was down 3.8 per cent in the South, down 1.2 per cent in the Mid-Atlantic region, and down 0.7 per cent in the West and Southwest.

Despite the drop in freshman enrollment at private institutions in the Southern states, total enrollment there was up 2.3 per cent, compared with increases of 1.5 per cent in the Northeast, 1.4 per cent in the West and Southwest, and 1 per cent in the Mid-Atlantic region.

Specialized Schools Gain

Estimates of private-college enrollment in all regions combined showed 2.9 per cent more undergraduates, 2.8 per cent more professional students, and 1.9 per cent more graduate students.

Among the private institutions surveyed by the N.I.I.C.U., professional schools and other specialized institutions (such as schools of law, medicine, music, and art) were the only category that showed a gain in first-year students this fall. The 2.4-per-cent increase in number of freshmen was part of an overall increase of 4 per cent at such institutions.

The survey showed a drop of more than 9 per cent in freshman enrollment at Ph.D.-granting universities, although increases in enrollment of other undergraduate, graduate, and professional students raised the universities' total enrollment 0.8 per cent above last fall's total.

Changes in total enrollment estimated by the N.I.I.C.U. for other kinds of private institutions included a gain of 1.1 per cent for comprehensive colleges and universities, a loss of 0.7 per cent for the more selective liberal-arts colleges, a gain of 0.8 per cent for the less selective liberal-arts colleges, and a loss of 2.9 per cent for two-year colleges.

More than 1,600 Faculty Positions in Engineering Were Vacant in 1980

WASHINGTON

A tenth of the 16,200 faculty positions in engineering at American colleges and universities were vacant in the fall of 1980, the National Science Foundation reports.

The vacancy rate would have been higher, N.S.F. said, had it not been for engineers from other countries. Nearly a fourth of all junior faculty members in engineering—instructors and assistant professors—received their bachelor's degrees outside the United States.

Data for the study, conducted for N.S.F. by the American Council on Education, were collected from 181 schools of engineering and weighted to represent the 244 institutions that had at least one accredited degree program in engineering in 1979.

The highest faculty-vacancy rate was in computer engineering, where 16 per cent of the positions were unfilled, followed by industrial engineering, with 13 per cent. Aeronautical and astronautical engineering had the lowest vacancy rate—4 per cent.

Harder to Recruit

Greater difficulty in recruiting faculty members during the past five years was reported by 64 per cent of the public engineering schools and 29 per cent of the private schools. All but 12 per cent of the schools reported some decline in their ability to recruit faculty members.

Engineering deans included in the survey blamed the shortage on competition from industry and on a decline in the number of people getting doctor's degrees in engineering.

The deans said they did not have much trouble retaining existing faculty members. Only 3 per cent of those in full-time permanent positions resigned during 1979-80 to take jobs in industry, the deans reported.

Teaching Loads Increased

Of the engineering schools reporting difficulty in recruiting faculty members, 80 per cent said they had increased the teaching loads of remaining faculty members. Two-thirds of the schools reported a greater reliance on graduate teaching assistants or part-time faculty members, and 54 per cent reported they were unable to offer courses in certain subjects.

Three-fourths of the engineering schools reported that faculty-recruiting difficulties had resulted in lower quality of research, and four-fifths reported a decline in the quality of instruction.

The study found that 40 per cent of the faculty vacancies had existed for at least a year. Positions were counted as vacant if filled by visiting or other temporary faculty members.

At the 50 engineering schools that spend the most money for research and development in engineering, the proportion of faculty positions unfilled was 8 per cent of the total, compared with the overall average of 11 per cent, the science foundation said.

—JACK MAGARRELL

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News Summary

Articles on inside pages

Two un. ns vying for the votes of 20,000 faculty members in the California State University system are exchanging increasingly bitter charges. Story on Page 4.

M.I.T. faculty members and administrators have endorsed affiliation with a $120-million biomedical research institute. Story on Page 3.

Congress reconvenes this week with basic questions unresolved on how much the government will spend on education. Story on Page 11.

The skills that college-bound students should possess have been listed by a faculty committee representing California's public colleges and universities. Story on Page 6.

Tougher rules governing the reporting of abuses in the treatment of human research subjects are being prepared by a Presidential commission. Story on Page 11.

John B. Slaughter, director of the National Science Foundation, hopes to develop joint science-education and research projects with private foundations. Story on Page 13.

A former basketball player at Boston College and four other people have been convicted in a point-shaving scandal. Story on Page 10.

Administrators' pay has risen an estimated 9.5 per cent since last fall. Story on Page 9; Fact-File and Chronicle Survey on faculty pay on Page 8.

The "blockbuster complex" has not spread to university presses, but many of them are using more big-business techniques. Story on Page 17.

Britain's universities have begun to announce how they will make the budget cuts required by the government. Story on Page 15.

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First Effects of U.S. Budget Cuts Beginning to Hit Many Colleges

Biggest impact won't be felt until next year; some officials are optimistic

By JANET HOOK and KIM McDONALD

Rutgers University was recently warned that its largest research contract with the federal government might be cut in half this year. The university also lost $119,000 in support for its pharmacy school. And it had to eliminate a program it ran last year to address the problems of the elderly.

At the Borough of Manhattan Community College, the 16-person staff of its financial-aid office was cut by one quarter. Its buildings now are not cleaned on weekends because maintenance workers supported by a federal public-service-job program have been laid off. And it had to find extra money to help its nursing students pay their tuition this fall.

Despite the continuing uncertainty in Washington over the final shape of the fiscal 1982 federal budget, those two institutions, and many others, have already begun to feel the effects of the massive retrenchment in federal aid to higher education that has been under way in Washington since President Reagan's inauguration.

Not All Are Pessimistic

The effects are being felt even though the bulk of the President's economic program did not take effect until October 1, when fiscal 1982 began, and despite the fact that the full results of many of the changes in tax laws and federal spending will not be seen on college campuses until next year.

Not all campus assessments of the President's economic and budget-cutting programs are pessimistic, however. Some college officials say their institutions will benefit if the Reagan Administration succeeds in reducing inflation. Others are optimistic that newly enacted tax cuts will spur private giving to colleges and universities. Still others say they are waiting to see what further budget cuts Congress approves before they pass judgment on what the federal government has wrought.

Even before Congress enacted a budget resolution this summer requiring reductions of $35-billion in federal spending in fiscal 1982, legislators had cut about $14-billion from the fiscal 1981 budget. Those reductions included the elimination or sharp curtailment of many programs aiding higher education, cuts that were the source of some of Rutgers University's recent losses.

In 1980-81, Rutgers received $119,000 in

Continued on Page 12, Column 1

Special NCAA Convention to Tackle Football Powers' Bid for Bigger Role

By LORENZO MIDDLETON

ST. LOUIS

The National Collegiate Athletic Association has called a special convention here this week in an attempt to prevent colleges and universities with major football programs from splitting with the 75-year-old association.

The meeting will focus on recommendations to reduce the number of institutions in the N.C.A.A.'s top football division and to lessen the influence of non-football-playing institutions on big-time football.

There is little question that the football powers, who believe they now have too little influence in important N.C.A.A. decisions, will emerge from the meeting a more powerful and exclusive group within the athletic association.

The 61 institutions with major football programs that make up the College Football Association must then decide whether they are satisfied with the changes. The C.F.A. members plan to make that decision at a special meeting here, following the close of the N.C.A.A.'s special convention.

TV 'Property Rights'

The football-association members also will decide whether or not to go ahead with a contract with NBC-TV that would conflict with the N.C.A.A.'s agreement with the other two major networks.

Claiming that only the N.C.A.A. is authorized to make deals for televising its members' games on major networks, the athletic association has threatened to take disciplinary action against institutions agreeing to the C.F.A. contract. Two lawsuits have been filed by C.F.A. members to stop such action. The lawsuits maintain that the N.C.A.A.'s position amounts to an illegal taking of the "property rights" of its members.

Court hearings have been delayed until after the special meeting, which is taking place just five weeks before the athletic association's regular annual convention, to be held this year in Houston.

Most C.F.A. members have maintained

Continued on Page 10, Column 1

NIH Halts 2 Grants to Rule-Breaking Researcher

By KIM McDONALD

WASHINGTON

The director of the National Institutes of Health has terminated two of the four grants awarded by the agency to a University of California professor who violated federal rules by performing the first known genetic-engineering experiments on humans.

The unprecedented decision ends a year-long contr[illegible] when Martin J. C[illegible] the [illegible]

[illegible] that Dr. Cline had violated federal regulations that protect human subjects as well as the institutes' guidelines for recombinant-DNA research when he performed the experiments in July, 1980.

Three N.I.H. advisory councils then considered what action should be taken against Dr. Cline, who received more than $250,000 from the institutes this year. Their recommendations—to terminate two of his four grants—were accepted late last [illegible]th by Thomas E. Malone, acting director [illegible]nstitutes.

[illegible] action was requested [illegible] of the National [illegible]ute, which [illegible]

UCLA DAILY BRUIN

U.C.L.A.'s Martin J. Cline

Top Officials to Recommend that MIT Affiliate with Controversial Institute

CAMBRIDGE, MASS.

In a joint letter to the faculty, the president and provost of the Massachusetts Institute of Technology have said that they will recommend that M.I.T. affiliate with an independent biomedical research institute.

The M.I.T. Corporation, the university's governing body, is expected to approve affiliation with the new research institute, which has been the subject of considerable debate during the past eight months, at a meeting this week.

President Paul E. Gray and Provost Francis E. Low sent the joint letter after a straw vote by some 350 faculty members indicated substantial support for M.I.T.'s affiliation with the proposed $120-million Whitehead Institute for Biomedical Research.

In their letter, the administrators guaranteed that faculty concerns over the relationship of the Whitehead staff to the M.I.T. faculty would continue to be addressed. They also told faculty members that the administration was "grateful for the care you have given" to discussions of the institute and that "the proposal is stronger because of your concern."

The research institute is to be headed by the Nobel laureate David Baltimore, professor of microbiology at M.I.T., and will have a staff of 10 to 20 professors selected mutually by M.I.T. and the institute, with each holding an M.I.T. appointment.

It is named for Edwin C. Whitehead, one of the country's wealthiest men. The former owner of Technicon Corporation and the majority stockholder in Revlon Inc., Mr. Whitehead has pledged a $100-million permanent endowment for the institute on top of $20-million for construction and $5-million to be drawn annually from a trust fund for operations.

In addition, he has offered M.I.T. a no-strings-attached gift of $7.5-million, which the university would use in its own biology department.

—E. PATRICK MC QUAID

Boards of Trustees of Community Colleges of the State University of New York.

Nassau Community College is part of the state university system, and Mr. Fitzgibbons was expected to be confirmed without difficulty by the system's trustees.

The indictment alleges that Mr. Gwydir and a Nassau vice-president improperly hired relatives of college officials—including Mr. Gwydir's son—as employees of a Comprehensive Employment and Training Act program run by the college. Three other officials were also indicted, on other charges. All five have pleaded innocent.

▪ Student Who Was Raped Files $10-Million Suit

An 18-year-old student at the University of California at Berkeley who was raped in her dormitory room has filed a $10-million negligence suit against the university, charging that it failed to correct security problems at the dormitory. The plaintiff, identified in the suit only as "Jane Doe," is being represented by Melvin Belli, a well-known San Francisco lawyer.

▪ Appeals Court Rules Title IX Covers Only Direct Aid

The U.S. Court of Appeals for the First Circuit has held that Title IX of the Education Amendments of 1972 applies only to educational programs that receive federal aid.

The anti-sex-bias law has been interpreted by the federal government as applying generally to institutions that receive federal funds, not just to the specific programs that directly receive such money.

The appeals court ruled in a sex-bias case brought by Ruth F. Rice, a law student at Harvard University. She argued that since the law school received federal aid under a work-study program, the entire school was covered by the law.

The court said Title IX would not apply unless she alleged bias in the operation of a particular program that received federal aid.

▪ N.C. Students Still Trying to Elect a President

Since April, there have been so many elections and run-offs for the post of student-government president at the University of North Carolina at Greensboro that people are losing count.

The outcome of the first election was challenged, as were results of at least one—and possibly two or three—run-offs. This fall, a clear winner finally emerged, but he resigned after being indicted on charges of credit-card fraud.

Last month, another round of voting was held, but before the results were announced one candidate told the student senate that he had obtained 50 blank ballots with the intention of trying to fix the election. Although he never enacted his plan, he withdrew from the race and the election was nullified by the senate.

Another vote was scheduled to take place last week, but at least eight candidates had entered the field and a run-off was seen as unavoidable. The winner, if any, will serve until mid-April.

▪ Gas Leaks Force Closing of Northern Arizona U.

Students at Northern Arizona University began Thanksgiving vacation a week early when university officers closed the campus because flammable gases had been detected in several buildings.

Fire officials and inspectors from the Southern Union Gas Company said there was no immediate danger on the campus, a university spokesman said. But the administration sent 13,000 students home anyway, both because parents had been upset by reports about the gases and because contractors installing a new natural-gas line on the campus will be able to complete their work more quickly if everybody is away. The spokesman said the gases, discovered by gas-company employees, were not believed to have leaked from the old natural-gas lines, but it is not yet clear where they did originate.

▪ Southern Cal. Students Rally Against High Tuition

Several hundred students at the University of Southern California chanted, "No Way, We Won't Pay" and wore buttons proclaiming, "The Buck$ Stop Here" at a campus rally against high tuition at the university and a planned increase next year.

Many students tore up fee-bill forms to protest the tuition, which now stands at $6,150 a year. University officials have indicated fees will rise next year but have not determined by how much.

▪ Students to Be Named Trustees in Massachusetts

Gov. Edward J. King of Massachusetts has signed into law a bill authorizing student membership on the five boards of trustees that govern the state's 28 public colleges and universities. Each of the five boards will be enlarged from eight members to nine. The new trustees will be elected by their respective student bodies.

Notes from Nashville

NASHVILLE

The weekend on which the Country Music Association gives out its annual awards brings to this city packs of recording executives and busloads of tourists. The recording executives, who wear their hair in pompadours and their shirts open to the second button, gather in the cocktail lounge of the Hyatt Regency to watch the glass elevators rise and fall. The tourists, who wear Stetsons and sensible shoes, visit the Country Music Stars Café to watch the neon lights blink. The stars themselves keep out of sight.

But in the carrels of the law library at Vanderbilt University here, the second-year law students are not humming Dolly Parton songs as they pore over their casebooks. The voice that repeats and repeats in their ears is that of Frank Sinatra, and he is singing "New York, New York."

The law students, weighted down by the *Internal Revenue Code of 1954* and gnawing unconsciously at their hangnails, live in a tight little world all their own. Nashville might as well be a thousand miles away.

It is, just now, a world of intense uncertainty. The second-year students are trying to line up jobs for the coming summer. This year, they cannot afford to grill hamburgers at a Dairy Queen in Kansas City, no matter how much it pays. They need jobs with law firms—firms that will, according to the traditional plan, probably hire them permanently when law school is over.

Bullets and Flybacks

Such jobs are hard to come by. The law students dress ever so carefully for their 20-minute on-campus interviews—and try hard to appear calm. They send to distant cities dozens of résumés with dozens of cover letters; they worry each afternoon when, during a study break, they trudge back to their apartments to open the mail.

They can tell just by hefting the envelope whether the news is good or bad. Thin envelopes contain one-page rejection letters that the law students call "bullets." *Please*, the bullets warn in the cold, measured tones of a Selectric II form letter, *do not construe our decision as a judgment about your personal qualities or your competence*.

The law students, sprawled across the living-room floor, drinking last night's coffee warmed over, read the bullets aloud to one another. They laugh at the patronizing disclaimers, but the laughter sounds forced.

They all understand about the numbers. Only a few of them can be in the top 10 per cent of the class, only a few can be on the law review. But they can't help thinking, as the bullets pile up in desk drawers, that if they had been allowed an extra 10 minutes with the interviewer, they could have changed his mind about their personal qualities, or that one more draft of the résumé would have shown their competence in a better light.

A Terrible Secret

Once in a great while, a law student gets a fat envelope: a "flyback," so called because a firm offers to fly a student back to the home office for an interview there.

A flyback!—fat with pages of instructions about making appointments and airline reservations. And what a terrible secret! Because a law student can't talk about a flyback. That would be boastful, and law students, although extremely competitive, are too well mannered to boast. But the others in the living room notice the sudden silence, the severely repressed smile. *A flyback! My God, he's got a flyback!*

There is little time for celebration: The law library and the *Internal Revenue Code of 1954* are waiting.

According to the ritual the second-year students have developed, they need not go directly to their dusty carrels. First, they check the law students' message board. Then, they visit the law students' locker room and the bulletin board where sign-up sheets for interviews are posted. ("Birmingham? Did I really sign up for a firm in *Birmingham*?")

The last stop is the law students' lounge, deep inside the building. It has a few vending machines and a television set, but the main attraction is an electronic game (bless its quarter-starved little circuits!) called Pac-Man. With a wide-eyed law student at the controls, the noisy Pac-Man races around his maze, at first fleeing red monsters and later, when for no particular reason the monsters have turned blue and become harmless, zapping them into oblivion.

In law school, where layers of intricate artifice obscure substance, it is reassuring to be able to zap a monster—even a harmless blue one—into oblivion. It helps the second-year students survive.

—LAWRENCE BIEMILLER

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20 Pct. of Science-Faculty Members Who Leave Departments Take Jobs Outside Higher Education, an NSF Study Reveals

WASHINGTON

A study by the National Science Foundation of faculty members in engineering and science has revealed that about a fifth of those who leave their departments take nonacademic positions.

A larger proportion, 34 per cent, leave to take other academic jobs, the N.S.F. estimates. About 20 per cent of faculty vacancies in science and engineering occur because of retirement and 4 per cent because of death or illness, according to the study.

Failure to receive tenure accounts for 12 per cent of the departing faculty members.

The N.S.F. study was based on data obtained in a 1980 survey of approximately 1,500 departments that offer Ph.D. degrees in science and engineering.

The data included reasons for departure of faculty members who had held jobs in those departments the previous year.

The departing professors amounted to 5 per cent of the total number of faculty members in the science and engineering departments, the science foundation estimates.

Faculty members in engineering departments were the most likely to leave to accept nonacademic jobs and the least likely to leave because they had been denied tenure, the N.S.F. study found.

The 28 per cent of faculty members in engineering departments who took nonacademic jobs compares with 13 per cent who did so in the social sciences and 14 in the biological sciences.

Only 1 per cent of the faculty members leaving engineering departments had been denied tenure, compared with 9 per cent who left faculty positions in mathematical sciences for that reason.

The low rate of tenure denial in engineering departments, the N.S.F. report says, "presumably is caused by the difficulty colleges of engineering have had in filling faculty slots and the resulting eased competition for tenure."

—JACK MAGARRELL

Why Scientists and Engineers Leave Faculty Jobs

Field	Per cent of faculty leaving	Retirement	Illness or death	Another academic position	Non-academic position	Failure to receive tenure	Other
Engineering	6%	23%	5%	32%	28%	5%	7%
Physical sciences	4%	27%	6%	21%	23%	13%	10%
Biological sciences	5%	23%	4%	32%	14%	16%	11%
Mathematical sciences	6%	11%	5%	39%	20%	12%	13%
Social sciences	6%	19%	3%	39%	13%	14%	12%
Psychology	5%	12%	2%	42%	21%	17%	6%
Total	5%	20%	4%	34%	20%	12%	10%

Note: Estimated for full-time faculty members who left the positions they held in 1978-79 in departments offering Ph.D. degrees in the science and engineering fields, based on data from approximately 1,500 such departments.

SOURCE: NATIONAL SCIENCE FOUNDATION

CHRONICLE SURVEY

9-Month Faculty Salaries for 1981-82

Averages According to Age

	Public		Private		All	
	Average salary	Increase over 1980-81	Average salary	Increase over 1980-81	Average salary	Increase over 1980-81
Ph.D.-granting universities						
35 or under	$21,112	9.2%	$23,184	11.9%	$21,666	10.0%
36 to 45	26,921	10.4%	31,832	13.2%	28,233	11.2%
46 to 55	30,564	7.3%	35,646	10.4%	31,922	8.2%
56 to 65	33,183	6.7%	38,209	9.1%	34,530	7.4%
Institutions granting other graduate degrees						
35 or under	$20,402	9.9%	$19,699	10.9%	$20,213	10.2%
36 to 45	24,669	8.9%	22,190	12.0%	24,002	9.7%
46 to 55	26,897	7.0%	25,976	9.5%	26,649	7.6%
56 to 65	27,233	7.4%	28,682	10.2%	27,623	8.2%
Institutions granting only bachelor's degrees						
35 or under	—	—	$17,254	10.5%	$17,254	10.5%
36 to 45	—	—	19,985	9.5%	19,985	9.5%
46 to 55	—	—	23,117	10.1%	23,117	10.1%
55 to 65	—	—	24,034	10.2%	24,034	10.2%
2-year colleges						
35 or under	$19,145	10.2%	—	—	$19,145	10.2%
36 to 45	22,262	9.1%	—	—	22,262	9.1%
46 to 55	23,494	8.7%	—	—	23,494	8.7%
56 to 65	23,281	8.6%	—	—	23,281	8.6%
All institutions†						
35 or under	$20,263	9.8%	$20,196	11.2%	$20,246	10.1%
36 to 45	24,664	9.5%	24,763	11.9%	24,705	10.1%
46 to 55	27,071	7.9%	28,386	10.0%	27,414	8.2%
56 to 65	27,973	7.4%	30,575	9.8%	28,652	8.1%

Comparisions by Tenure Status

	All institutions	All public institutions	All 4-year institutions	4-year public institutions	4-year private institutions	2-year public institutions
Ph.D.-granting universities						
Tenured						
Average salary	$32,038	$30,724	$32,038	$30,724	$35,640	—
Change from previous year	9.3%	8.5%	9.3%	8.5%	11.1%	—
Nontenured (tenure track)						
Average salary	$22,559	$22,084	$22,559	$22,084	$23,861	—
Change from previous year	9.8%	8.9%	9.8%	8.9%	12.0%	—
Not on tenure track						
Average salary	$19,621	$17,254	$19,621	$17,254	$26,113	—
Change from previous year	8.7%	7.6%	8.7%	7.6%	10.8%	—
Institutions granting other graduate degrees						
Tenured						
Average salary	$26,263	$26,487	$26,263	$26,487	$25,654	—
Change from previous year	8.6%	7.9%	8.6%	7.9%	10.8%	—
Nontenured (tenure track)						
Average salary	$21,232	$21,448	$21,232	$21,448	$20,647	—
Change from previous year	9.6%	9.3%	9.6%	9.3%	10.3%	—
Not on tenure track						
Average salary	$17,332	$16,836	$17,332	$16,836	$18,678	—
Change from previous year	9.8%	9.5%	9.8%	9.5%	10.6%	—
Institutions granting only bachelor's degrees						
Tenured						
Average salary	$23,076	—	$23,076	—	$23,076	—
Change from previous year	10.2%	—	10.2%	—	10.2	—
Nontenured (tenure track)						
Average salary	$17,260	—	$17,260	—	$17,260	—
Change from previous year	10.0%	—	10.0%	—	10.0%	—
Not on tenure track						
Average salary	$16,719	—	$16,719	—	$16,719	—
Change from previous year	8.6%	—	8.6%	—	8.6%	—
All types combined†						
Tenured						
Average salary	$27,280	$26,941	$28,332	$28,377	$28,241	$23,424
Change from previous year	8.9%	8.3%	9.0%	8.2%	10.8%	8.7%
Nontenured (tenure track)						
Average salary	$20,978	$21,036	$21,425	$21,732	$20,807	$19,340
Change from previous year	9.9%	9.6%	9.7%	9.2%	10.8%	10.7%
Not on tenure track						
Average salary	$18,403	$17,629	$18,208	$17,022	$20,584	$19,114
Change from previous year	9.3%	8.9%	9.2%	8.6%	10.2%	9.5%

— Not applicable or insufficient data for reliable estimate.

† Does not include institutions where faculty members do not have academic ranks.

Note: Survey data are based on responses of 4,319 individuals, weighted to represent full-time faculty members on nine-month contracts at colleges and universities of all types except law and medical schools, proprietary institutions, private two-year colleges, and colleges with fewer than 500 students. Faculty members in the group from which the sample was drawn offered courses in the fall of 1980. Those hired for their first faculty jobs in the fall of 1981 were not included. Salary figures do not include the value of contributed services of members of religious orders or others. There is a 95-per-cent probability that the average salary figure for tenured faculty members at all institutions is within $180 of the average found in the sample. The "95-per-cent confidence intervals" for other salary averages are included in a technical report on survey design and sampling statistics that will be available from John Minter Associates late in January. Specific questions may be addressed to John Minter Associates, P.O. Box 107, Boulder, Colo. 80306.

SOURCE: SURVEY DESIGNED AND CONDUCTED FOR THE CHRONICLE BY JOHN MINTER ASSOCIATES

FACT-FILE

Administrators' Salaries

Median amounts estimated for 1981-82

Position	Median salaries	
	Public institutions	Private institutions
Chief executive of a system	$59,240	—
Chief executive of a single institution	53,364	$50,000
Executive vice-president	43,000	34,000
Chief academic officer	43,200	36,850
Chief business officer	41,272	33,800
Chief student-affairs officer	38,181	27,273
Chief development officer	38,041	33,600
Chief public-relations officer	31,030	20,500
Chief planning officer	36,183	28,000
Director, personnel and human resources	31,450	23,980
Chief health-professions officer	36,976	—
Chief budgeting officer	32,232	31,008
Director, legal services	36,796	—
Registrar	29,376	20,905
Director, church relations	—	17,000
Director, learning-resources center	30,777	19,533
Director, library services	33,228	23,000
Director, computer services	32,652	25,000
Director, educational-media services	28,332	19,763
Director, institutional research	29,700	22,600
Director, special and deferred gifts	32,000	26,375
Administrator, grants and contracts	31,000	22,900
Director, affirmative action, equal employment	26,665	23,300
Director, employee training	26,106	—
Comptroller	32,320	27,000
Director, internal audit	26,500	24,000
Bursar	26,000	24,000
Director, food services	26,076	20,500
Director, physical plant	30,012	23,250
Director, purchasing	25,323	20,000
Director, bookstore	21,487	14,800
Director, campus security	24,901	19,070
Director, information systems	31,700	31,500
Director, news bureau	23,073	17,760
Director, auxiliary services	27,848	21,818
Director, admissions	29,500	24,550
Director, foreign students	28,619	22,650
Director, international-studies education	36,118	—
Director, student financial aid	25,737	19,000
Director, student placement	25,901	19,770
Director, student counseling	28,500	20,700
Director, student union	25,992	20,550
Director, student health services (physician)	50,936	33,500
Director, student health services (nurse)	19,848	15,900
Director, student housing	24,766	16,500
Director, athletics	34,020	26,300
Director, athletics, men's	31,399	—
Director, athletics, women's	24,221	16,133
Director, campus recreation and intramurals	25,428	18,667
Director, alumni affairs	22,000	18,000
Director, information office	23,856	17,280
Director, community services	28,971	18,000
Director, publications	28,574	18,000
Chief planning and budget officer	41,669	—
Chief development and public-relations officer	37,350	27,418
Director, personnel and affirmative action	26,883	20,800
Director, admissions and financial aid	28,860	33,508
Director, development and alumni affairs	—	30,000
Dean, architecture	46,500	—
Dean, agriculture	40,950	—
Dean, arts and letters	39,521	—
Dean, arts and sciences	44,300	45,000
Dean, business	39,487	30,240
Dean, communications	35,632	—
Dean, continuing education	36,557	31,788
Dean, education	41,988	29,567
Dean, engineering	40,800	40,000
Dean, extension	35,802	—
Dean, fine arts	39,487	29,200
Dean, graduate programs	43,500	29,000
Dean, health-related professions	38,503	—
Dean, home economics	44,034	—
Dean, humanities	36,610	22,800
Dean, instruction	39,487	—
Dean, law	—	56,500
Dean, library and information sciences	43,771	—
Dean, mathematics	30,000	24,684
Dean, medicine	68,601	—
Dean, music	38,400	36,800
Dean, nursing	35,594	26,421
Dean, vocational education	36,930	—
Dean, pharmacy	44,500	—
Dean, sciences	37,500	26,133
Dean, social sciences	35,450	23,680
Dean, special programs	28,645	—

— Not reported

Note: Median salaries are preliminary estimates, based on data from 96 public institutions and 79 private institutions.

SOURCE: COLLEGE AND UNIVERSITY PERSONNEL ASSOCIATION

Council Probes Variations in Salaries of Male and Female Teachers

WASHINGTON

"Objective factors" cannot explain the differences in salary and academic status between male and female faculty members, says a study by the National Research Council.

Even when a sample of 5,164 male and female academics in the sciences, engineering, and the humanities were matched by educational background, academic field, and years of experience, differences in rank and salary persisted, says a report on the study.

"Objective factors alone cannot account adequately for the career differences which exist between male and female Ph.D.'s," it concludes.

The report cautions, however, that the survey findings "refer to possible indications of sex discrimination" only in the careers of women in academe, not in industry or other sectors.

The study by the council's Committee on the Education and Employment of Women in Science and Engineering was conducted to determine if reasons offered in the past for women's lack of advancement were valid—for example:

▶ That many women have earned doctorates only recently and thus are concentrated in the lower academic ranks.

▶ That women are less free to change jobs because of family ties.

▶ That female academics are likely to interrupt their careers for child-rearing and thus retard their professional advancement.

Instead, the study found that even when men and women were matched by the prestige of the educational institutions they had attend[illegible] were employed at, "differen[illegible] rank and salary remain *after* matching."

At each level of academic employment, the study found, "women are more likely than their matched male counterpart to be in a nonfaculty or junior faculty position."

Among those who earned doctorates 20 or more years ago, 87 per cent of the men are now full professors, compared with 67 per cent of the women. Of those earning their degrees between 10 and 19 years ago, "the man was 50 per cent more likely than the woman to have been promoted to full professor."

The report says the study found no evidence that affirmative-action goals had produced "reverse discrimination" in hiring doctorate holders. Even for academics who earned their degrees in the 1975-78 period, "involuntary unemployment was two and a half times higher for women than for men," according to the report.

The study found that academic women who had received Ph.D.'s before 1960 earned about 11 per cent, or an average of $3,800, less than men with similar backgrounds.

"Salary differences between young male and female Ph.D.'s in academe still exist even after controlling for type and quality of doctoral training," it found. "The largest differentials in pay for the post-1975 Ph.D.'s were found in chemistry ($3,300) and the biological sciences ($2,100)."

Concerning possible obstacles to women's advancement due to family responsibilities, the study found that only 10 per cent of the female academics with young children had dropped out of the labor force. "Moreover, relatively few women doctorates—less than half—have children," the report says.

The study found that among junior faculty members "the women were somewhat more likely than the men to have moved to a new institution." It found that "unmarried women or those without children do not fare any better in faculty promotions than married women with children."

Copies of the report, *Career Outcomes in a Matched Sample of Men and Women Ph.D.s*, may be obtained from the National Academy Press, National Academy of Sciences, 2101 Constitution Avenue, N.W., Washington 20418. —CHERYL M. FIELDS

Pay Rises 9.5 Pct. for Adminstrators at Colleges

WASHINGTON

The salaries of administrators in higher education have gone up 9.5 per cent this year, the College and University Personnel Association estimates.

Based on preliminary data from its annual survey, the estimate compares with an average salary increase of 8.9 per cent for faculty members in the Chronicle Survey's national sampling this fall (*The Chronicle*, November 11).

Last year, administrators' salaries rose 8.7 per cent, according to the personnel association.

For 1981-82, the median salary for presidents of public colleges and universities is $53,364, according to the preliminary data from the association's survey. At private institutions, the median is $50,000.

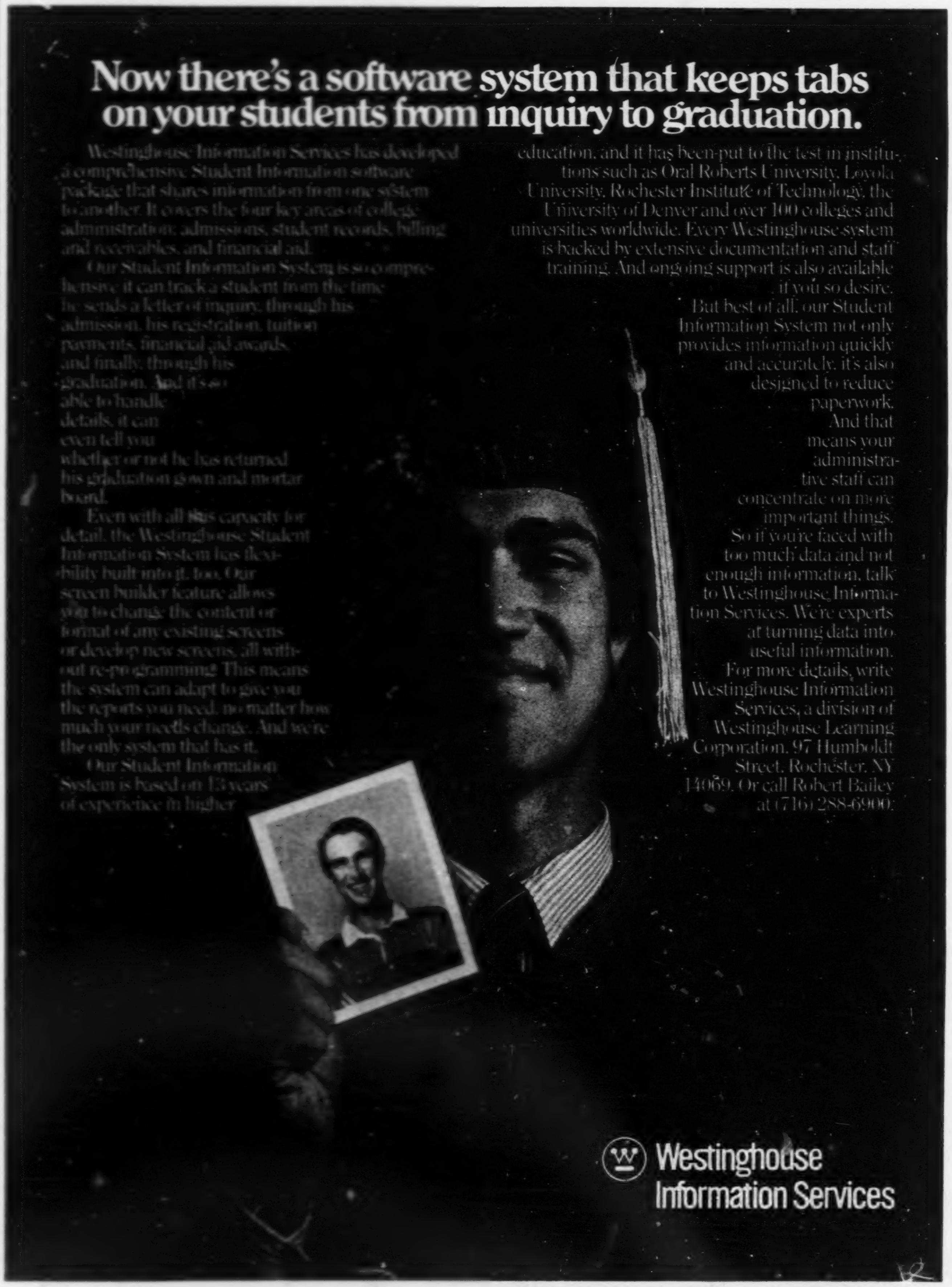
Half of the chief academic officers—provosts, vice-presidents for academic affairs, and the like—have salaries of $40,025 or above. That is 12.5 per cent higher than last year's median.

Other one-year increases in median salaries estimated by the personnel association include: chief business officers, up 10.8 per cent to $38,425; chief development officers, up 16.8 per cent to $35,016; personnel directors, up 14.3 per cent to $29,515.

The median salary for directors of men's athletics is $30,967, compared with $23,366 for directors of women's athletics.

The overall average salary increase of 9.5 per cent for administrators was estimated by the personnel association on the basis of data from 138 institutions that reported salaries for both 1980-81 and 1981-82.

The association's final, detailed report on administrators' salaries for 1981-82 is scheduled for publication in January. —JACK MAGARRELL



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NCAA

Continued from Page 1

that they do not want to break away from the N.C.A.A. over the television-contract issue. Some have predicted, however, that a split will be unavoidable unless the athletic association agrees to give the football powers major concessions at this week's special convention.

"The future of the N.C.A.A. is at stake," said H. Boyd McWhorter, commissioner of the Southeastern Conference, which includes 10 C.F.A. members. "Although I applaud the N.C.A.A. for taking this step, we're going to have to wait and see if its actions are significant enough to make an impact."

Tougher Rules for Top Divisions

The N.C.A.A. members will consider four proposals during the convention that would make it more difficult for new teams to join the association's top basketball division.

But much of the debate is expected to focus on various proposals for reducing the size of the top football division.

Under current rules, Division I-A football includes 137 members, each of whom must maintain an average attendance of 17,000 per home game and have a stadium with a minimum of 30,000 seats, or have 12 or more Division I sports in addition to football.

One proposal, introduced by leading C.F.A. members, would create what has been described as a "super-division" of football teams within the N.C.A.A. The new "Division IV" would eliminate the 12-sport option and raise the average home-game attendance requirement to 20,000. It would maintain the 30,000-seat-stadium requirement.

N.C.A.A. officials have estimated that the proposed new division would be limited to 77 members, who would move up from Division I-A.

Another proposal, introduced by the Big 8 Conference, whose members are also in the C.F.A., would take away the 12-sport option for members in Division I-A and keep the 17,000-attendance and 30,000-seat-stadium requirements. That proposal would leave 83 institutions in Division I-A, with the rest moving down to Division I-AA, according to N.C.A.A. estimates.

The N.C.A.A. Council has proposed a third change, which resembles the Big 8 proposal except that it includes several exemptions and waiver procedures for certain colleges that do not meet the attendance and stadium-size requirements. The N.C.A.A. proposal would reduce the size of Division I-A to about 95 members.

One other proposal, introduced by members of the Ivy League, would lessen the current restrictions on Division I-A membership by reducing the attendance requirement to 15,000 per game and the stadium-size requirement to 25,000 seats. "I don't think that one has much of a chance," said an N.C.A.A. spokesman.

'Borderline Schools' Resist

Persuading institutions to vote to step down from Division I won't be easy, said Mr. McWhorter of the Southern Conference. "We're going to get a lot of resistance from the borderline schools, the ones who want to play major college football but don't have the money to pay for it."

Acceding to the football association's demands for a speedy reorganization, the N.C.A.A. also has proposed that institutions be required to comply with any changes in membership criteria immediately, rather than allowing them the usual two-year grace period.

In another important concession to the C.F.A., the N.C.A.A. Council has proposed that in the future only institutions with football teams in a particular division be allowed to vote on television policies affecting that division.

That proposal would be introduced at the association's regular meeting in January.

In a more controversial proposal stemming from the television dispute, the C.F.A. would prohibit the athletic association from taking over "property rights" of its members. Officers of the N.C.A.A. are strongly opposed to that proposal, charging that it would strip the association of its authority to govern athletic events.

The C.F.A. includes all major football conferences and independent colleges except the Pacific-10 and the Big 10 Conferences. Since it was formed in 1977, its members have repeatedly expressed dissatisfaction with the way smaller colleges control such matters as limits on scholarships, the size of coaching staffs, and recruiting.

Over the past four years, the N.C.A.A. membership has turned down every major proposal offered by C.F.A. members. But by challenging the N.C.A.A. on the television issue, the C.F.A. leaders believe they will finally get a hearing in the larger organization.

The football association's television deal—which would take many of the most popular teams out of the N.C.A.A.'s television package—"gave us the sort of leverage we needed to get the N.C.A.A. to listen to our complaints," Mr. McWhorter said.

"I guess you could compare it to the old story about the farmer hitting the mule with a two-by-four to get its attention."

FACT-FILE

Job Interests of Journalism Students

Area of job interest	White		Black		Hispanic		All students †	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
Public relations	2,389	18.3%	171	15.1%	47	13.9%	2,793	17.7%
Advertising	2,187	16.8%	110	9.8%	35	10.3%	2,505	15.9%
News and editorial								
Daily newspapers	1,506	11.6%	61	5.4%	38	11.2%	1,722	10.9%
Wire services	68	0.5%	3	0.2%	3	0.8%	86	0.5%
Community newspapers	339	2.6%	10	1.0%	5	1.4%	383	2.4%
Radio-television news	1,021	7.8%	209	18.5%	35	10.3%	1,381	8.8%
Radio-television production	824	6.3%	181	16.1%	44	13.0%	1,144	7.3%
Magazines	994	7.6%	54	4.8%	14	4.1%	1,171	7.4%
Photojournalism	546	4.2%	34	3.0%	18	5.4%	651	4.1%
College teaching	128	1.0%	12	1.0%	—	—	161	1.0%
High-school teaching	94	0.7%	4	0.3%	7	2.0%	117	0.7%
Journalism research	47	0.3%	3	0.2%	1	0.3%	69	0.4%
Journalism graduate school	137	1.0%	45	4.0%	8	2.3%	198	1.3%
Other journalism interest	563	4.3%	43	3.7%	14	4.1%	663	4.2%
Nonjournalism interest	292	2.2%	14	1.2%	7	2.0%	347	2.2%
Law school	58	0.4%	12	1.0%	1	0.3%	75	0.5%
Undecided	1,820	14.0%	162	14.4%	62	18.3%	2,287	14.5%
Other	20	0.1%	—	—	3	0.8%	—	—
Total number of women	7,760	59.5%	729	64.6%	192	56.1%	9,370	59.7%
Total number of men	5,273	40.5%	398	35.4%	150	43.9%	6,321	40.3%
Total ††	13,033	100.0%	1,127	100.0%	342	100.0%	15,776*	100.0%

† Graduate and undergraduate students majoring in journalism at 54 institutions.
†† Some columns do not add to exact totals because of rounding.
* Includes 85 students not identified by sex.

SOURCE: PAUL V. PETERSON, OHIO STATE UNIVERSITY

Daily Journalism Lures Few Students

COLUMBUS, OHIO

Only one in nine students majoring in journalism is interested in news or editorial work on a daily newspaper, a national survey has found. One in three wants to work in advertising or public relations.

According to Paul V. Peterson, professor of journalism at Ohio State University, who has surveyed journalism enrollment every year since 1968, the number of students majoring in journalism has grown from an estimated 11,390 in 1960 to 75,000 in 1980. But, he says, "the number of current students who are contemplating work on newspapers upon graduation is consistent with the potential number of openings each year, contrary to suggestions in the past."

According to the data obtained in the fall of 1980 from 54 colleges and universities with journalism programs, nearly 60 per cent of all students majoring in journalism are women. The students interested in newspaper careers are about equally divided between men and women.

More than 88 per cent of the majors are white non-Hispanics, Mr. Peterson found. Fewer than 8 per cent are black; about 2 per cent are Hispanic.

Former Player Is Convicted in College Basketball Fix

NEW YORK

A former Boston College player was convicted with four other men last week of conspiring in a gambling scheme to manipulate the final scores of six basketball games during the 1978-79 season.

Richard Kuhn, 26, who was then a reserve forward on Boston's team, was paid $2,500 per game and given cocaine and Quaaludes for attempting to shave points from the games, according to testimony at the jury trial in U.S. district court in Brooklyn.

Convicted with Mr. Kuhn were James Burke, of New York, a convicted extortionist who is serving time for a parole violation; Paul Mazzei, of Pittsburgh, in jail on a narcotics conviction; and two brothers, Anthony Perla and Rocco Perla, of Braddock Hills, Pa. Rocco Perla and Mr. Kuhn were high-school classmates.

According to witnesses who testified for the government during the five-week trial, the defendants were involved in a gambling syndicate that attempted to win large sums of money by beating the final point spreads set by bookmakers before the games. As it turned out, the witnesses said, the syndicate won money on only three of the games involved, lost money on two, and broke even on the sixth.

Each of the five defendants could receive a maximum sentence of 30 years in jail and $45,000 in fines. Their lawyers said they would appeal.

The point-shaving scheme came to light last winter when U.S. Justice Department investigators were looking into Mr. Burke's suspected connection with the 1978 theft of $5.8-million from the Lufthansa cargo terminal at New York's Kennedy International Airport.

Henry Hill, a convicted extortionist and a government informant in the robbery case, told investigators that he was involved in the basketball gambling scheme. Given immunity from prosecution in the Boston College case as a key government witness, Mr. Hill testified that Mr. Kuhn and two other players, Ernie Cobb and Jim Sweeney, had been paid to shave points.

Mr. Sweeney, a co-captain of the 1978-79 team, testified that he had accepted $500 from Mr. Kuhn and agreed to help shave points, but that he had done nothing to carry out the agreement. Mr. Cobb denied any involvement.

The Brooklyn College case involves the first known incident of point shaving in college basketball since 1961, when 37 players from 22 colleges were charged with taking bribes to influence the outcome of basketball games.

Officials of the National Collegiate Athletic Association have described the Boston College case as an "isolated incident." The association works closely with the Federal Bureau of Investigation to monitor gambling activities and urges coaches to warn players not to become involved.

However, according to reports published last spring, the F.B.I. was investigating allegations that players in the Big 8 Conference had been involved in point-shaving schemes during the 1980-81 basketball season.

—LORENZO MIDDLETON

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News Summary

Articles on inside pages

Tuskegee Institute now is envied for the technical and agricultural programs that once earned it criticism, says its president. Story on Page 6.

Appeals have been filed in two lawsuits that produced conflicting rulings on the legality of secret promotion and tenure votes. Story and texts on Page 10.

Corporate donations to education totaled a billion dollars in 1980, says the Council for Financial Aid to Education. Story on Page 15.

The Chronicle Survey finds that 81 per cent of faculty members had earnings beyond their base incomes last year. Table on Page 14 and story on Page 15.

College foreign-language enrollments have been stable in recent years, but there were major shifts in popularity among languages. Story on Page 16.

The number of foreign students in the U.S. rose 9 per cent last year, even though the number of Iranian students dropped 8 per cent. Story on Page 17.

Universities want the federal government to change a rule requiring researchers to document the time spent on nongovernment work. Story on Page 21.

Congress must act quickly or the Education Department's processing of Pell Grants will be disrupted, campus officials say. Story on Page 21.

Contemporary philosophy is at a dead end, argues the Princeton University philosopher Richard Rorty in his controversial *Philosophy and the Mirror of Nature*. Story on Page 25.

A dozen university students in South Africa have been jailed in a new government crackdown on dissidents. Story on Page 23.

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Universities Charge U.S. Presses Them to Restrict Activities of Foreign Scholars

Defense panel trying to resolve conflict between security and free flow of information

By KIM McDONALD

WASHINGTON

▶ At Stanford University, a professor has refused to provide the Commerce Department with a detailed description of the activities of a visiting Chinese scholar.

▶ At the Massachusetts Institute of Technology, the chairman of the physics department declined a State Department request last spring for information about the work and professional associations of a Chinese scientist there.

▶ At the University of Wisconsin at Madison, the Commerce Department has told officials that they must have an export license for a computerized weather-analysis system that the university is developing for a Chinese institute.

▶ At the University of Minnesota, President C. Peter Magrath has rejected a State Department demand that the university restrict the activities of a visiting Chinese computer scientist (*The Chronicle*, November 11).

Those cases came to light recently—some within the last week—as an increasing number of officials at major research universities complained about the government's attempts to control scientific exchanges with foreign researchers.

On several campuses, "department heads, principal investigators, and others are receiving letters from officials in [the Departments of] State, Commerce, and Defense that ask for information, assert the need for an export license, and otherwise suggest various courses of action giving the impression of a certain amount of harassment," according to David A. Wilson, executive assistant to the president of the University of California.

Mr. Wilson made his comments before an advisory panel to the Defense Department that met last week to propose ways of resolving complaints by universities that federal agencies were pressuring them to limit the activities of visiting foreign scholars in the name of national security.

Proposals Expected in January

The panel was established at the request of the House Armed Services Committee to investigate the responsiveness of universities to national-security requirements.

The panel, whose four members are university representatives on the Defense Science Board, will send its proposals to Secretary of Defense Caspar W. Weinberger and the House Armed Services Committee by mid-January.

Its decision could influence the revision

Continued on Page 20, Column 1

Fall Enrollments Set a Record; Large Gains at 2-Year Colleges

By JACK MAGARRELL

WASHINGTON

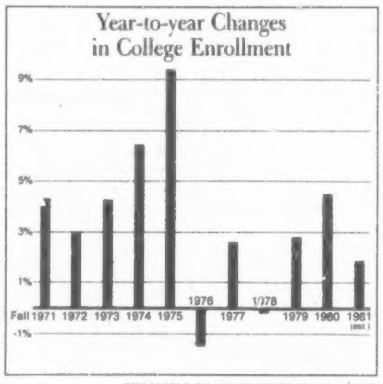
The number of students on American college campuses this fall has set a record, the National Center for Education Statistics reported last week.

The 1.9-per-cent rise over the fall of 1980 was due almost entirely to a substantial gain in enrollment at two-year colleges.

Together, increases at public and private two-year colleges accounted for all but 520 of the estimated 225,574 additional students enrolled this fall at all colleges and universities.

This fall's increase was much smaller than last year's 4.5-per-cent rise. The government agency's estimate of total enrollment in the 50 states and the District of Columbia this fall is 12,322,469.

Enrollment at public community colleges increased by 4.7 per cent to an estimated total of 4,526,394. Enrollment at private two-year institutions increased sharply this fall—up 12 per cent to an estimated total of 217,792.



CHRONICLE CHART BY PETER H. STAFFORD
SOURCE: NATIONAL CENTER FOR EDUCATION STATISTICS

The increases came despite a declining population of 18-year-olds, rising tuition, budget cuts, and a few outright limits on enrollment.

'We Could Go Bankrupt'

In some cases, higher enrollments have proved to be a mixed blessing.

"We are becoming so successful we could go bankrupt," says Chancellor Frank E. Horton of the University of Wisconsin at Milwaukee. Mr. Horton's campus has a record 26,663 students enrolled this fall.

Mr. Horton attributes the urban institution's 2.8-per-cent increase in enrollment in part to economic conditions that have encouraged more students to look for education close to home.

Because economic hard times also have forced the university to tighten its budget, the rising enrollment has added to the

Continued on Page 19, Column 1

Entrance Rules Tightened at Some Public Institutions

By MALCOLM G. SCULLY

Faced with an overload of underprepared students and financial problems that could force them to limit enrollment, many public colleges and universities are raising their entrance requirements.

Officials at those institutions give several reasons for the change:

▶ The cost of providing remedial instruction to underprepared students is becoming prohibitive. "Remediation is the curse of American higher education," says the head of one statewide higher-education agency.

▶ As their budgets get tighter, many institutions plan to stabilize or reduce enrollment and are using tougher entrance requirements to do so.

▶ Many faculty members have advocated higher admissions standards as a means of encouraging secondary schools to improve their college-preparatory programs.

Under the new standards, institutions are requiring higher scores on standardized tests and better high-school grades, and they are expanding the type and number of courses they expect prospective students to take in high school.

At Florida State University, applicants for next fall's entering class will have to have grade-point averages of 2.5 in high school and scores totaling 950 on the mathematics and verbal sections of the Scholastic Aptitude Test. This year's freshmen needed only a 2.0 average in high school

Continued on Page 13, Column 1

CHRONICLE SURVEY

Estimated Earnings of Faculty Members Beyond Their Basic Salaries for 1980-81

Annual income above base salary earned within the institution

Type of institution	Public 4-year institutions			Private 4-year institutions			All institutions		
	Per cent reporting earnings	Average amount of earnings	Per cent of base salary	Per cent reporting earnings	Average amount of earnings	Per cent of base salary	Per cent reporting earnings	Average amount of earnings	Per cent of base salary
Ph.D.-granting universities									
Professor	65.3%	$6,147	19.1%	68.0%	$8,700	25.0%	66.5%	$6,847	21.0%
Assoc. professor	69.9%	4,636	19.3%	79.3%	4,672	18.2%	71.5%	4,646	19.0%
Ass't professor	60.0%	3,929	19.9%	75.8%	5,240	24.7%	64.2%	4,281	21.2%
All ranks	65.0%	4,952	19.2%	71.1%	7,001	23.9%	67.2%	5,500	21.0%
Institutions granting other graduate degrees									
Professor	54.9%	$4,400	16.1%	76.2%	$3,857	14.3%	61.1%	$4,254	15.6%
Assoc. professor	78.5%	3,984	17.8%	74.5%	4,102	19.5%	77.0%	4,016	18.3%
Ass't professor	66.2%	2,905	15.4%	60.5%	3,262	18.0%	64.2%	3,001	16.1%
All ranks	66.0%	3,785	16.8%	68.7%	3,713	15.9%	66.9%	3,786	16.8%
Institutions granting only bachelor's degrees									
Professor	—	—	—	54.4%	$2,029	8.9%	54.4%	$2,029	8.9%
Assoc. professor	—	—	—	72.1%	1,387	7.5%	72.1%	1,387	7.5%
Ass't professor	—	—	—	63.6%	1,751	10.9%	63.6%	1,751	10.9%
All ranks	—	—	—	63.5%	1,703	9.2%	63.5%	1,703	9.2%
2-year colleges									
All ranks	—	—	—	—	—	—	70.2%	$3,004	14.6%
All types combined†									
Professor	60.6%	$5,179	17.6%	65.3%	$4,982	17.8%	63.2%	$4,651	16.6%
Assoc. professor	73.9%	4,275	18.5%	74.5%	3,577	16.3%	74.2%	3,928	17.5%
Ass't professor	60.5%	3,382	17.4%	65.0%	3,514	18.9%	63.9%	3,224	17.0%
Instructor	65.7%	2,827	18.8%	51.7%	1,144	7.5%	57.5%	2,287	15.2%
All ranks	65.1%	4,306	17.9%	67.0%	4,280	18.2%	66.4%	4,014	17.4%

Annual extra income earned outside the institution

Type of institution	Public 4-year institutions			Private 4-year institutions			All institutions		
	Per cent reporting earnings	Average amount of earnings	Per cent of base salary	Per cent reporting earnings	Average amount of earnings	Per cent of base salary	Per cent reporting earnings	Average amount of earnings	Per cent of base salary
Ph.D.-granting universities									
Professor	56.9%	$4,833	14.5%	73.3%	$8,662	24.3%	63.0%	$5,856	17.2%
Assoc. professor	55.8%	3,605	15.1%	58.6%	6,191	24.7%	56.3%	4,296	17.8%
Ass't professor	46.7%	3,585	16.0%	54.5%	4,013	19.1%	48.8%	3,699	18.3%
All ranks	53.3%	4,041	15.2%	66.4%	7,272	23.7%	57.1%	4,904	17.7%
Institutions granting other graduate degrees									
Professor	56.9%	$3,383	11.9%	66.7%	$3,145	11.3%	59.7%	$3,304	11.7%
Assoc. professor	47.3%	3,925	17.2%	58.2%	4,014	18.5%	51.4%	3,949	17.6%
Ass't professor	45.1%	2,052	10.9%	39.5%	1,486	8.6%	43.1%	1,900	10.3%
All ranks	50.0%	3,205	13.5%	55.8%	3,195	14.3%	52.0%	3,202	13.7%
Institutions granting only bachelor's degrees									
Professor	—	—	—	50.0%	$2,822	11.8%	50.0%	$2,822	11.8%
Assoc. professor	—	—	—	50.8%	5,022	25.9%	50.8%	5,022	25.9%
Ass't professor	—	—	—	42.0%	2,810	17.4%	42.0%	2,810	17.4%
All ranks	—	—	—	47.8%	3,394	17.6%	47.8%	3,394	17.6%
2-year colleges									
All ranks	—	—	—	—	—	—	39.1%	$3,732	18.1%
All types combined†									
Professor	56.6%	$4,018	13.1%	63.8%	$4,864	16.6%	58.9%	$3,774	13.2%
Assoc. professor	52.3%	3,782	16.3%	55.2%	4,991	22.5%	52.4%	4,262	18.9%
Ass't professor	45.3%	2,736	14.1%	43.8%	2,661	14.6%	43.0%	3,129	16.6%
Instructor	42.9%	2,299	14.8%	62.1%	3,174	20.6%	45.0%	2,356	15.5%
All ranks	51.7%	3,578	14.3%	55.3%	4,581	18.9%	51.7%	3,873	16.2%

Total annual income above base salary

Type of institution	Public 4-year institutions			Private 4-year institutions			All institutions		
	Per cent reporting earnings	Average amount of earnings	Per cent of base salary	Per cent reporting earnings	Average amount of earnings	Per cent of base salary	Per cent reporting earnings	Average amount of earnings	Per cent of base salary
Ph.D.-granting universities									
Professor	82.6%	$8,186	25.3%	88.4%	$13,987	40.3%	84.6%	$9,736	29.5%
Assoc. professor	81.4%	6,449	27.1%	89.7%	8,181	32.4%	83.1%	6,912	29.0%
Ass't professor	75.6%	5,341	27.0%	87.9%	7,015	33.6%	78.9%	5,788	28.8%
All ranks	80.1%	6,744	26.0%	88.2%	11,124	37.7%	82.4%	7,914	29.4%
Institutions granting other graduate degrees									
Professor	79.4%	$5,450	19.6%	92.9%	$5,422	19.6%	83.3%	$5,443	19.7%
Assoc. professor	88.2%	5,653	25.2%	89.1%	6,054	29.1%	88.5%	5,761	26.2%
Ass't professor	81.7%	3,486	18.6%	65.8%	3,892	21.8%	76.1%	3,595	19.4%
All ranks	82.6%	4,961	21.6%	82.3%	5,265	24.0%	82.5%	5,043	22.2%
Institutions granting only bachelor's degrees									
Professor	—	—	—	76.5%	$3,289	14.2%	76.5%	$3,289	14.2%
Assoc. professor	—	—	—	88.5%	4,022	21.4%	88.5%	4,022	21.4%
Ass't professor	—	—	—	78.4%	2,928	18.3%	78.4%	2,928	18.3%
All ranks	—	—	—	80.9%	3,344	17.9%	80.9%	3,344	17.9%
2-year colleges									
All ranks	—	—	—	—	—	—	77.5%	$4,603	22.0%
All types combined†									
Professor	81.1%	$6,670	22.4%	85.2%	$7,662	26.7%	82.7%	$4,980	17.8%
Assoc. professor	85.3%	6,008	26.1%	89.0%	6,215	28.9%	86.0%	4,838	21.7%
Ass't professor	76.7%	4,313	22.4%	76.9%	4,660	25.4%	77.5%	3,491	18.5%
Instructor	74.3%	3,796	25.3%	75.9%	3,626	23.3%	70.0%	2,816	18.7%
All ranks	81.0%	5,756	23.7%	83.2%	6,676	28.3%	81.5%	4,614	19.8%

Quartile distribution of total income above base salary

Type of institution	Public 4-year institutions			Private 4-year institutions			All institutions		
	High (a)	Median (b)	Low (c)	High (a)	Median (b)	Low (c)	High (a)	Median (b)	Low (c)
Ph.D.-granting universities									
Professor	$9,000	$5,843	$3,000	$14,522	$10,000	$5,000	$12,000	$7,000	$3,500
Assoc. professor	7,000	4,250	2,500	7,000	5,500	3,000	7,000	5,000	2,729
Ass't professor	6,000	3,678	1,650	8,900	6,000	3,685	8,000	4,071	2,500
All ranks	7,448	4,500	2,500	12,000	6,550	3,629	10,000	5,400	2,899
Institutions granting other graduate degrees									
Professor	$6,300	$3,657	$2,200	$6,500	$3,550	$1,800	$6,300	$3,615	$2,000
Assoc. professor	8,000	4,500	2,500	5,500	3,000	1,700	6,587	3,700	2,000
Ass't professor	4,100	2,700	1,200	4,160	3,000	1,300	4,160	3,000	1,300
All ranks	6,500	3,756	2,100	5,540	3,000	1,750	6,000	3,400	1,900
Institutions granting only bachelor's degrees									
Professor	—	—	—	$4,000	$2,250	$1,400	$4,000	$2,250	$1,400
Assoc. professor	—	—	—	2,800	1,700	900	2,800	1,700	900
Ass't professor	—	—	—	4,300	2,000	9,000	4,300	2,000	900
All ranks	—	—	—	3,500	2,000	1,000	3,500	2,000	1,000
2-year colleges									
All ranks	—	—	—	—	—	—	$5,300	$3,000	$1,800
All types combined†									
Professor	$8,000	$5,000	$2,500	$9,500	$4,000	$2,000	$8,000	$4,400	$2,000
Assoc. professor	7,243	4,250	2,500	5,450	2,729	1,450	6,000	3,400	1,750
Ass't professor	5,000	3,400	1,500	5,100	3,000	1,000	5,044	3,000	1,275
Instructor	5,114	2,700	2,100	3,000	2,100	1,900	3,335	2,300	1,900
All ranks	7,000	4,000	2,221	6,000	3,000	1,500	6,300	3,500	1,800

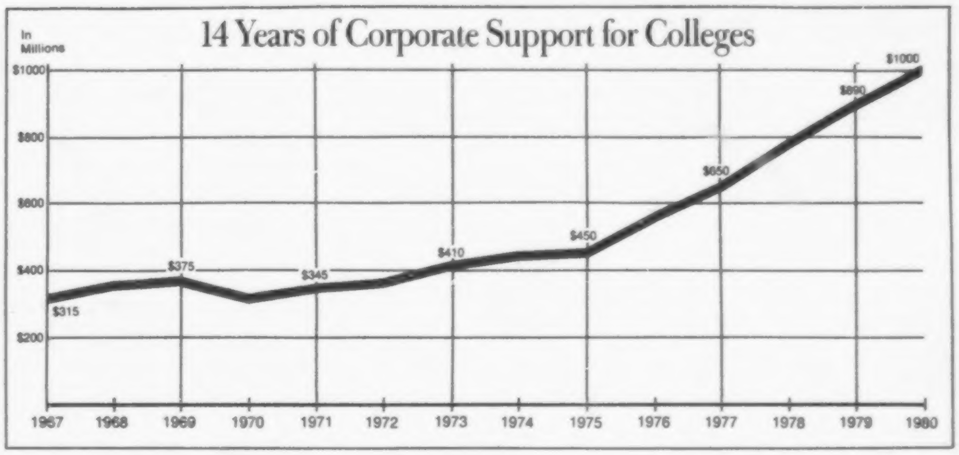
— Not available or not applicable.
† Institutions without academic ranks are not included.
(a) One-fourth of the faculty members reporting other earnings received more than this amount.
(b) One-half of the faculty members reporting other earnings received more than this amount.
(c) One-fourth of the faculty members reporting other earnings received less than this amount.

Note: Survey data are based on responses of 4,310 individuals, weighted to represent full-time faculty members on nine-month contracts at colleges and universities of all types except law and medical schools, proprietary institutions, private two-year colleges, and colleges with fewer than 500 students. Faculty members in the group from which the sample was drawn were those who offered courses in the fall of 1980. Those hired for their first faculty jobs in the fall of 1981 were not included. Salary figures do not include the value of contributed services of members of religious orders or others.

There is a 95-per-cent probability that the average amount of extra earnings for faculty members of all ranks at all institutions is within $138 of the average found in the sample. For subgroups, the comparable "95-per-cent confidence intervals" are larger. Confidence intervals for other salary averages are included in a technical report on survey design and sampling statistics that will be available from John Minter Associates late in January. Specific questions may be addressed to John Minter Associates, P.O. Box 107, Boulder, Colo. 80306.

SOURCE: SURVEY FOR THE CHRONICLE BY JOHN MINTER ASSOCIATES

Corporate Gifts to Education Totaled $1-Billion in 1980



CHRONICLE CHART BY PETER H. STAFFORD

SOURCE: COUNCIL FOR FINANCIAL AID TO EDUCATION

NEW YORK

Corporations gave a billion dollars to education in 1980, the Council for Financial Aid to Education estimated last week.

That amount of corporate support represents an increase of 12.4 per cent over the $890-million estimated for 1979 by C.F.A.E., a nonprofit organization that promotes voluntary support of higher education. The increase occurred during a period in which corporate income declined by nearly 4 per cent.

The figures are based on data from 732 corporations that responded to a yearly survey by C.F.A.E. and the Conference Board, a New York research organization concerned with business economics.

"This significant increase in corporate giving to higher education in 1980 is a good omen," said John R. Haire, president of C.F.A.E. "While no one can expect the corporate world to compensate for all the cuts in federal spending for social programs, we anticipate that corporations will, profits permitting, continue to increase their giving to levels consistent with the new demands of the 80's."

Contributions to education amounted to 0.41 per cent of the corporations' net income before taxes, the highest percentage since 1971.

Total corporate contributions for educational and charitable purposes in 1980 were estimated by C.F.A.E. at $2.7-billion, or 1.1 per cent of net income before taxes.

Higher Limit on Deductions

Under federal tax law, corporations could take tax deductions for charitable gifts of up to 5 per cent of pre-tax net income in 1980. This year, Congress raised the limit to 10 per cent, effective in 1982, but few corporations have come close to the 5-per-cent limit.

The Department of Commerce has estimated the pre-tax net income of corporations in 1980 at $245.5-billion, down 3.9 per cent from 1979.

Corporate foundations helped the corporations increase their giving during the year of reduced income, C.F.A.E. said, by drawing on money accumulated in previous years. The corporate foundations spent 13.1 per cent more in 1980 than they received.

In 1980, for the first time, the largest share of corporate support for education was in the form of research grants and grants to specific departments within colleges. The proportion of corporate support given to match employees' gifts increased to 13.4 per cent in 1980, up from 9.6 per cent five years earlier.

Education received about the same share of corporations' total giving as in previous years. The 37.8 per cent of corporate gifts earmarked for education compares with 34 per cent for health and welfare, 11.7 per cent for civic activities, 10.9 per cent for culture and art, and 5.6 per cent for other purposes.

Nearly all the corporate support for education goes to colleges and universities. In 1979, private elementary and secondary schools received less than 1 per cent of corporations' total giving for education, according to C.F.A.E. estimates.

81 Pct. of Professors in Survey Report Outside Earnings Averaging $5,756

Seven of eight faculty members at private universities increased their income last year with extra earnings that equaled more than a third of their base salaries, according to the Chronicle Survey.

The survey, which gathered data this fall from more than 4,000 individual faculty members in a national sample, found that the extra earnings of faculty members at private universities in 1980-81 had averaged $11,124.

At public universities, 80 per cent of the faculty members had outside income. It averaged $6,744 and increased their salaries by 26 per cent.

Among faculty members at all types of colleges and universities, 81 per cent had extra earnings, averaging $5,756, which was equal to 24 per cent of their base salaries.

Not counted in the averages are those faculty members who reported no extra earnings during the year.

The Chronicle Survey's study of extra earnings included only full-time faculty members on nine-month contracts. The income reported includes only that from professional work and does not include royalties, investment income, rents, or gifts.

Nearly two-thirds of the faculty members reported receiving additional income from the same institution that paid their base salaries. These earnings averaged $4,306 and were paid for faculty members' services in research work, administrative assignments, and for teaching summer courses, night classes, or other classes beyond the normal teaching load.

A smaller proportion of faculty members reported extra earnings from outside the institutions that paid their base salaries.

The outside earnings were for research and teaching at other institutions and for consulting or other services.

About 52 per cent of all faculty members reported they had some income last year from outside their institution. The average of such income was $3,578, or 14.3 per cent of base salary. For full professors at private universities, however, the average outside earnings amounted to $8,662.

The survey was conducted by John Minter Associates of Boulder, Colo.

HARVARD UNIVERSITY GRADUATE SCHOOL OF EDUCATION

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February 1, 1982
For more information and application materials, write to:
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Longfellow 114
Cambridge, MA 02138
or call **617/495-3414.**

Students from throughout the United States and over 50 foreign countries attend the Graduate School of Education. Numbering approximately 1000, 53% are engaged in doctoral study, 37% are in the one-year master's program, and 5% are enrolled in a certificate of advanced studies program. The great majority have significant professional experience. Their goals are to prepare themselves for advancement in such fields as educational administration, government, corporate training and human resource management, educational media, counseling, community service, consulting, teaching and research.

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Reading

FACT-FILE

Language Enrollments

Number of Students Registered in Fall, 1980

	Fall, 1980 registrations			Change since 1977
	Undergraduate	Graduate	Total	
Arabic	3,056	410	3,466	+12.9%
Chinese	10,746	620	11,366	+15.9%
French	242,709	5,652	248,361	+ 0.9%
German	122,364	4,546	126,910	− 6.2%
Greek (ancient)	17,288	4,823	22,111	−14.4%
Hebrew	15,303	4,126	19,429	+ 0.4%
Italian	33,958	833	34,791	+ 4.4%
Japanese	11,130	376	11,506	+ 7.3%
Latin	24,250	785	25,035	+ 2.6%
Portuguese	4,599	295	4,894	− 1.2%
Russian	22,750	1,237	23,987	−13.7%
Spanish	371,958	7,421	379,379	+ 0.7%
Other	12,530	1,072	13,602	−15.1%
Total	892,641	32,196	924,837	− 0.9%

Registrations in Other Languages

Afrikaans	5
Akkadian	95
Albanian	2
Amharic	9
Aramaic	142
Armenian	231
Assyrian	2
Aymara	5
Azeri	5
Balinese	1
Bambara	6
Basque	21
Bengali	18
Bulgarian	2
Burmese	1
Cambodian	4
Cantonese	39
Catalan	19
Chagatai	2
Cherokee	29
Coptic	12
Creole, Haitian	13
Crow	16
Czech	151
Dakota	99
Danish	293
Dutch	500
Egyptian	44
Estonian	4
Finnish	152
Fon	1
Fulani	3
Gaelic	15
Georgian	5
Greek (modern)	820
Hausa	70
Hawaiian	610
Hindi	198
Hindi-Urdu	76
Hittite	6
Hungarian	98
Ibo	5
Icelandic	8
Icelandic (old)	23
Ilokano	17
Indonesian	113
Iranian	20
Irish	13
Javanese	9
Kikongo	1
Korean	365
Krio	24
Lakota	67
Lao	2
Latvian	1
Lingala	1
Lithuanian	47
Malay-Indonesian	14
Malayalam	4
Marathi	6
Mende	2
Mongolian	13
Mongolian (classical)	7
Navajo	225
Nepali	6
Norwegian	1,616
Ojibway	84
Pali	24
Persian	703
Polish	1,268
Quechua	30
Rumanian	187
Samoan	18
Sanskrit	218
Serbo-Croatian	182
Shona	13
Sinhala	2
Slavonic (O.C.)	44
Slovak	21
Slovenian	21
Sumerian	15
Swahili	576
Swedish	1,575
Syriac	50
Tagalog	263
Tahitian	9
Tamil	25
Tartar	1
Telegu	9
Thai	80
Tibetan	56
Tlingit	5
Tongan	11
Tuamotuan	2
Turkic	22
Turkish	147
Turkish (Ottoman)	5
Tuvin	3
Ugaritic	22
Ukrainian	111
Urdu	23
Uzbek	12
Vedic	1
Vietnamese	74
Welsh	8
Wolof	51
Xhosa	1
Yiddish	944
Yoruba	127
Yupic	85
Zulu	41

Note: Based on returns from 835 two-year institutions and 1,506 four-year institutions reporting enrollments in one or more foreign languages.

SOURCE: MODERN LANGUAGE ASSOCIATION

Rolls of Students Taking Foreign Languages Decline Less than 1 Pct. in 3 Years

NEW YORK

The number of students studying foreign languages at American colleges and universities decreased less than 1 per cent from 1977 to 1980, according to a survey of 2,341 institutions by the Modern Language Association.

A total of 924,837 students were taking foreign-language courses in the fall of 1980, compared with 933,478 in the fall of 1977, when the association last took a census of foreign-language enrollment. That is a decline of 0.9 per cent.

Enrollment "remained relatively stable for the latter half of the 1970's after some serious drops in the first half of the decade," said Richard I. Brod, director of foreign-language programs for the M.L.A. However, he noted that there were major differences in enrollment patterns among the 12 commonly taught languages that accounted for 911,235 of the 924,837 students in the fall of 1980.

The biggest percentage increases in enrollment were in Chinese, which rose 15.9 per cent from 9,809 to 11,366, and in Arabic, which rose 12.9 per cent from 3,070 to 3,466.

Increases were also reported in French, up 0.9 per cent; Hebrew, up 0.4 per cent; Italian, up 4.4 per cent; Japanese, up 7.3 per cent; Latin, up 2.6 per cent; and Spanish, up 0.7 per cent.

The biggest percentage decreases were in ancient Greek, which fell by 14.4 per cent from 25,843 to 22,111, and in Russian, which fell by 13.7 per cent from 27,784 to 23,987.

Other languages for which decreases were reported were German, down 6.2 per cent; and Portuguese, down 1.2 per cent.

"The most interesting trend," Mr. Brod said, "is the rise in French and Latin." He said the increases reported in 1980 for those languages were the first in 10 years.

He added that the increases could have been caused by a return to foreign-language requirements at a number of colleges and universities. While the extent of the return to requirements "is very hard to quantify," Mr. Brod said, the association does have a list of some 40 institutions that have reinstated requirements over the past five years or so.

He estimated that the proportion of institutions with language requirements may have risen from 50 per cent in 1977 to about 60 per cent by 1980.

"When requirements are restored," he said, "the traditional languages, like Latin and French, do better." He added that the increase in Latin could also have been brought about by a reported shortage of Latin teachers in secondary schools.

Mr. Brod said that the decreases in Russian and German were at least partially due to their elimination at some smaller colleges and universities that faced financial problems.

—MALCOLM G. SCULLY

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21 Pct. of Science Professors Are Recent Recipients of Doctorates

WASHINGTON

About one-fifth of the science and engineering faculty members at the country's doctorate-granting institutions in 1980 had acquired their doctoral degrees within the previous seven years, a National Science Foundation survey has found. The proportion was 21 per cent in 1980, compared with 28 per cent in 1974 and 39 per cent in 1968, the N.S.F. said.

Between 1974 and 1980, the proportion fell in 14 of 15 science and engineering fields, with the largest drop occurring in mathematics. Chemical engineering was the only field that showed an increase—from 21 to 23 per cent—in the proportion of its faculty members who had recently earned their doctorates, the foundation reported.

About one-fifth of faculty members during the 1978-79 academic year who vacated their positions before the start of the next academic year left to accept nonacademic positions. In engineering fields, about 28 per cent of faculty members who left accepted nonacademic positions, compared with 13 per cent for social-sciences-faculty members.

Voluntary resignations to accept other academic positions accounted for one-third of the departures.

CLASSICS
PROGRAM PLANNING

Deans and Chairpersons responsible for operating or planning programs in Classics or Humanities should know of the Campus Advisory Service (CAS) of the American Philological Association.

On request the CAS, established ten years ago, sends a small team of experienced classicists to visit a campus for about two days, discuss curriculum, staffing, and any other concerns with deans and faculty, and prepare a report. The team is chosen with a view to the needs and circumstances of the host institution, and if possible from the same general area.

The host institution is asked only to provide accommodations for the consultants and to cover their travel costs.

For further details contact the Director of the CAS, Professor Mark W. Edwards, Classics Department, Stanford University, Stanford, California 94305.

FACT-FILE

Foreign Students

Institutions with Largest Enrollments

Rank Institution	Number of foreign students	Percentage of total enrollment
1. Miami-Dade Community College	4,520	10.3%
2. University of Southern California	3,456	12.6%
3. Columbia University and Teachers College, and Barnard College	2,591	10.9%
4. Los Angeles City College	2,409	12.2%
5. Texas Southern University	2,347	29.0%
6. University of Wisconsin at Madison	2,280	5.5%
7. University of Michigan at Ann Arbor	2,104	5.8%
8. Northeastern University	2,081	5.0%
9. Boston University	2,015	7.2%
10. University of California at Los Angeles	1,990	5.8%
11. George Washington University	1,898	9.1%
12. University of Minnesota at Minneapolis-St. Paul	1,891	2.7%
13. University of Texas at Austin	1,860	4.1%
14. Ohio State University, main campus	1,832	3.4%
15. University of California at Berkeley	1,830	5.9%
16. Massachusetts Institute of Technology	1,829	22.4%
17. University of Miami	1,803	11.5%
18. University of Houston, central campus	1,789	5.8%
19. New York University	1,775	5.5%
20. Indiana University at Bloomington	1,772	5.6%
21. State University of New York College at Buffalo	1,749	8.0%
22. University of Pennsylvania	1,686	7.5%
23. Harvard University	1,645	10.4%
24. University of Florida	1,625	4.9%
25. University of Washington	1,618	4.4%
26. University of Oklahoma at Norman	1,611	7.5%
27. Texas A&M University, main campus	1,600	4.8%
28. University of Kansas	1,585	6.5%
29. Oklahoma State University, main campus	1,579	7.0%
30. Southern Illinois University at Carbondale	1,566	6.7%
31. American University	1,552	12.5%
32. Howard University	1,541	13.6%
33. University of Southwestern Louisiana	1,535	11.1%
34. University of Illinois at Urbana-Champaign	1,521	4.4%
35. Stanford University	1,502	11.1%
36. Iowa State University	1,486	6.0%
37. University of San Francisco	1,463	24.0%
38. Michigan State University	1,439	3.0%
39. University of Pittsburgh, main campus	1,388	4.7%
40. North Texas State University	1,380	8.0%
41. University of Arizona	1,367	4.4%
42. University of Texas at Arlington	1,339	6.6%
43. Ohio University, main campus	1,321	9.0%
44. University of Missouri at Columbia	1,306	5.3%
45. Pennsylvania State University, main campus	1,293	3.7%
46. Cornell University	1,283	7.0%
47. University of Illinois at Chicago Circle	1,278	6.1%
48. San Jose State University	1,266	4.9%
49. Louisiana State University at Baton Rouge	1,255	4.5%
50. Brigham Young University, main campus	1,249	4.2%
51. California State University at Los Angeles	1,249	5.6%
52. University of Maryland at College Park	1,240	3.3%
53. Northrop University	1,200	82.6%
54. Purdue University, main campus	1,196	3.6%
55. Syracuse University, main campus	1,170	5.7%
56. California State University at Fresno	1,163	7.8%
57. Portland State University	1,148	6.9%
58. Florida International University	1,112	9.5%
59. University of Hawaii at Manoa	1,102	5.4%
60. Georgetown University	1,059	8.8%
61. San Diego State University	1,055	3.3
62. Oregon State University	1,053	6.0%
63. Seattle Central Community College	1,046	10.4%
64. Arizona State University	1,044	2.8%
65. Utah State University	1,043	10.5%

Where They Come From

Rank Country or territory	Students	Rank Country or territory	Students
1. Iran	47,550	26. Brazil	2,870
2. Taiwan	19,460	27. China	2,770
3. Nigeria	17,350	28. Israel	2,710
4. Canada	14,320	29. Cuba	2,640
5. Japan	13,500	30. Turkey	2,600
6. Venezuela	11,750	31. France	2,570
7. Saudi Arabia	10,440	32. Jamaica	2,400
8. Hong Kong	9,660	33. Kenya	1,930
9. India	9,250	34. Egypt	1,860
10. Lebanon	6,770	35. Peru	1,800
11. Mexico	6,730	36. Ghana	1,790
12. Thailand	6,550	37. Ethiopia	1,570
13. Vietnam	6,490	38. Pacific Islands	1,570
14. Republic of Korea	6,150	39. Australia	1,530
15. Jordan	6,140	40. Bahamas	1,480
16. Malaysia	6,010	41. Iraq	1,460
17. United Kingdom	4,440	42. El Salvador	1,450
18. Colombia	3,930	43. Singapore	1,320
19. Greece	3,750	44. Panama	1,300
20. Philippines	3,390	45. Trinidad and Tobago	1,300
21. West Germany	3,310	46. Netherlands	1,290
22. Indonesia	3,250	47. Italy	1,250
23. Libya	3,080	48. Chile	1,230
24. Kuwait	2,990	49. Ecuador	1,210
25. Pakistan	2,990	50. Bangladesh	1,180

SOURCE: INSTITUTE OF INTERNATIONAL EDUCATION

Iranian Enrollments Drop in U.S. Colleges but Total Number of Foreign Students Rises

NEW YORK

The number of Iranian students at American colleges and universities declined last year—the first decrease since the takeover of the American embassy in Teheran by supporters of the Ayatollah Ruhollah Khomeini in 1979, according to the Institute of International Education.

In *Open Doors*, its annual survey of foreign-student enrollment in the U.S., the institute reported that 47,550 Iranian students were enrolled on American campuses in 1980-81, compared with 51,870 the previous year—a decline of 8 per cent.

The survey found that 311,882 foreign students—from 184 countries and territories—were studying in the United States in 1980-81, an increase of 9 per cent over 1979-80. Of 3,030 institutions in the survey, 2,734 said that they enrolled foreign students.

While the number of Iranian students fell last year, they still constituted the largest single group of foreigners at American institutions, the institute said. The other leading countries or territories sending students to the U.S. were Taiwan, Nigeria, Canada, Japan, Venezuela, Saudi Arabia, Hong Kong, India, and Lebanon.

The survey found that members of the Organization of Petroleum Exporting Countries accounted for 101,625, or 33 per cent, of all foreign students on U.S. campuses. As recently as 1968-69, OPEC students made up only 9 per cent of the total, an institute spokesman said.

Other findings of the survey:

▶ Of the 311,882 foreign students, 139,990 were in bachelor's-degree programs, 99,110 were in graduate programs, and 47,670 were seeking associate degrees. The remainder were in nondegree programs.

▶ Only 2.3 per cent of the students received financial support from the United States government. Of the remainder, 67.4 per cent were being supported by their families, 12.9 per cent by their home governments, 8.6 per cent by a college or university, and 4.5 per cent by private agencies.

▶ A total of 80,470 foreign students were enrolled in engineering programs. There were 54,380 foreign students enrolled in business and management, 24,310 in the social sciences, 23,030 in the natural sciences, 19,180 in mathematics and computer science, 15,450 in fine and applied arts, 13,070 in the humanities, 11,980 in education, 11,320 in the health professions, and 8,660 in agriculture.

In a statement accompanying the report, Wallace Edgerton, president of the institute, attacked the Reagan Administration's proposed cuts in spending for educational and cultural exchanges. Under a proposal now pending in the Senate, the Administration would cut such exchanges by more than 50 per cent.

Copies of *Open Doors: 1980-81* are available for $20 each from the Office of Communications, Institute of International Education, 809 United Nations Plaza, New York, 10017.

—MALCOLM G. SCULLY

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FACT–FILE

Estimated College Enrollment in Fall, 1981

Public institutions

	Universities			Other 4-year institutions			2-year institutions			All public institutions		
	Fall 1980 (actual)	Fall 1981 (estimated)	Change	Fall 1980 (actual)	Fall 1981 (estimated)	Change	Fall 1980 (actual)	Fall 1981 (estimated)	Change	Fall 1980 (actual)	Fall 1981 (estimated)	Change
Full-time students												
Men	908,158	914,715	+ 0.7%	966,813	965,205	− 0.2%	810,297	841,400	+ 3.8%	2,685,268	2,721,320	+ 1.3%
Women	742,028	758,814	+ 2.3%	978,356	984,254	+ 0.6%	782,034	821,816	+ 5.1%	2,502,418	2,564,884	+ 2.5%
Total	1,650,186	1,673,529	+ 1.4%	1,945,169	1,949,459	+ 0.2%	1,592,331	1,663,216	+ 4.5%	5,187,686	5,286,204	+ 1.9%
Part-time students												
Men	235,079	230,263	− 2.0%	450,257	442,540	− 1.7%	1,151,983	1,200,802	+ 4.2%	1,837,319	1,873,605	+ 2.0%
Women	263,647	259,462	− 1.6%	588,423	575,228	− 2.2%	1,580,319	1,662,376	+ 5.2%	2,432,389	2,497,066	+ 2.7%
Total	498,725	489,725	− 1.8%	1,038,680	1,017,768	− 2.0%	2,732,302	2,863,178	+ 4.8%	4,269,708	4,370,671	+ 2.4%
Total enrollment												
Men	1,143,237	1,144,978	+ 0.2%	1,417,070	1,407,745	− 0.7%	1,962,280	2,042,202	+ 4.1%	4,522,587	4,594,925	+ 1.6%
Women	1,005,675	1,018,276	+ 1.3%	1,566,779	1,559,482	− 0.5%	2,362,353	2,484,192	+ 5.2%	4,934,807	5,061,950	+ 2.6%
Total	2,148,912	2,163,254	+ 0.7%	2,983,849	2,967,227	− 0.6%	4,324,633	4,526,394	+ 4.7%	9,457,394	9,656,875	+ 2.1%

Private institutions

	Universities			Other 4-year institutions			2-year institutions			All private institutions		
	Fall 1980 (actual)	Fall 1981 (estimated)	Change	Fall 1980 (actual)	Fall 1981 (estimated)	Change	Fall 1980 (actual)	Fall 1981 (estimated)	Change	Fall 1980 (actual)	Fall 1981 (estimated)	Change
Full-time students												
Men	302,897	303,112	+ 0.1%	634,925	618,396	− 2.6%	66,150	77,535	+17.2%	1,003,976	999,045	− 0.5%
Women	220,011	223,385	+ 1.5%	596,409	604,321	+ 1.3%	89,876	96,870	+ 7.8%	906,296	924,576	+ 2.0%
Total	522,908	526,497	+ 0.7%	1,231,338	1,222,719	− 0.7%	156,026	174,405	+11.8%	1,910,272	1,923,621	+ 0.7%
Part-time students												
Men	108,179	104,716	− 3.2%	224,987	226,778	+ 0.8%	14,645	16,685	+13.9%	347,811	348,179	+ 0.1%
Women	104,377	102,759	− 1.6%	253,213	264,333	+ 4.4%	23,828	26,702	+12.1%	381,418	393,794	+ 3.2%
Total	212,556	207,475	− 2.4%	478,200	491,111	+ 2.7%	38,473	43,387	+12.8%	729,229	741,973	+ 1.7%
Total enrollment												
Men	411,076	407,828	− 0.8%	859,916	845,176	− 1.7%	80,795	94,220	+16.6%	1,351,787	1,347,224	− 0.3%
Women	324,388	326,144	+ 0.5%	849,622	868,654	+ 2.2%	113,704	123,572	+ 8.7%	1,287,714	1,318,370	+ 2.4%
Total	735,464	733,972	− 0.2%	1,709,538	1,713,830	+ 0.3%	194,499	217,792	+12.0%	2,639,501	2,665,594	+ 1.0%

All institutions, public and private

	Universities			Other 4-year institutions			2-year institutions			All institutions		
	Fall 1980 (actual)	Fall 1981 (estimated)	Change	Fall 1980 (actual)	Fall 1981 (estimated)	Change	Fall 1980 (actual)	Fall 1981 (estimated)	Change	Fall 1980 (actual)	Fall 1981 (estimated)	Change
Full-time students												
Men	1,211,055	1,217,827	+ 0.6%	1,601,742	1,583,603	− 1.1%	876,447	918,935	+ 4.8%	3,689,244	3,720,365	+ 0.8%
Women	962,039	982,199	+ 2.1%	1,574,765	1,588,575	+ 0.9%	871,910	918,686	+ 5.4%	3,408,714	3,489,460	+ 2.4%
Total	2,173,094	2,200,026	+ 1.2%	3,176,507	3,172,178	− 0.1%	1,748,357	1,837,621	+ 5.1%	7,097,958	7,209,825	+ 1.6%
Part-time students												
Men	343,258	334,979	− 2.4%	675,244	669,318	− 0.9%	1,166,628	1,217,487	+ 4.4%	2,185,130	2,221,784	+ 1.7%
Women	368,024	362,221	− 1.6%	841,636	839,561	− 0.2%	1,604,147	1,689,078	+ 5.3%	2,813,807	2,890,860	+ 2.7%
Total	711,282	697,200	− 2.0%	1,516,880	1,508,879	− 0.5%	2,770,775	2,906,565	+ 4.9%	4,998,937	5,112,644	+ 2.3%
Total enrollment												
Men	1,554,313	1,552,806	− 0.1%	2,276,986	2,252,921	− 1.1%	2,043,075	2,136,422	+ 4.6%	5,874,374	5,942,149	+ 1.2%
Women	1,330,063	1,344,420	+ 1.1%	2,416,401	2,428,136	+ 0.5%	2,476,057	2,607,764	+ 5.3%	6,222,521	6,380,320	+ 2.5%
Total	2,884,376	2,897,226	+ 0.4%	4,693,387	4,681,057	− 0.3%	4,519,132	4,744,186	+ 5.0%	12,096,895	12,322,469	+ 1.9%

Note: Estimates for 1981 are based on data from a sample of 943 institutions.

SOURCE: NATIONAL CENTER FOR EDUCATION STATISTICS

Fall Enrollments

Continued from Page 1

strain on the university's faculty and staff, he says, and has adversely affected students.

"Students are scrambling for courses," he said during the fall registration period. "Many are down to their second or third choice and are deciding to delay their education."

Some of the declines reported this fall are the result of deliberate policies aimed at reducing enrollments to fit limited funds and facilities.

At Ohio State University, total enrollment on the Columbus campus for the fall quarter was down 3.3 per cent—to 52,682—from a year ago.

The reduction at Ohio State marked the beginning of a three-year plan to bring the Columbus enrollment under a limit set by the legislature.

The university reduced the number of new freshmen admitted to the Columbus campus this fall by 7.9 per cent to 6,677. Admission of first-year and second-year transfer students was reduced by 53 per cent to 515.

Influence of California's Growth

The effects of community-college enrollments on the national total are most evident in California. About 1 of every 10 college students in the entire United States this year is enrolled in a California community college.

Preliminary estimates indicate a statewide increase of 3.9 per cent to a total of about 1,236,000 students in the state's two-year colleges.

Because the California legislature authorized state funds for only a 2.5-per-cent increase in community-college enrollment, the institutions accepted some students for whom there would be no state reimbursement and had to turn away others.

At American River College, a two-year public institution in Sacramento, overall enrollment rose 5 per cent this fall to a total of 22,766, but more than 3,300 applicants failed to get in, a college representative said.

Those who found no room at American River College included 1,043 who applied for the data-processing program, 1,391 who applied for the electronics program, and 1,106 who applied for the business program.

The number of women enrolled in American colleges and universities increased this fall by 2.5 per cent over last year, double the 1.2-per-cent increase in the number of men enrolled.

Officials of the National Center for Education Statistics said it was the sixth consecutive year in which the enrollment of women had grown at a faster rate than the enrollment of men.

Female Majority on Campuses

Women now outnumber men on American campuses by nearly half a million. This year, 52 of every 100 students are women, compared with 45 of every 100 six years ago.

Although the estimated growth this fall was slim, enrollment did increase in a year when the number of 18-year-olds in the U.S. population declined by 1.9 per cent, and the average tuition rate went up 13 per cent at private institutions and 16 per cent at public institutions.

The N.C.E.S. estimates are based on data obtained from a sample of 943 colleges and universities.

The general trends in the N.C.E.S. estimates confirm an earlier report by J. Ernest Mickler, director of an annual survey for the University of Alabama and the American College Testing Program.

Mr. Mickler, in a report based on data from about 1,000 institutions, estimated the overall increase in enrollment at 1.6 per cent, with community colleges and part-time students accounting for most of the gain. (See *The Chronicle*, November 4.)

The N.C.E.S. report estimates that part-time enrollment is up 2.3 per cent this fall, compared with an increase of 1.6 per cent for full-time students.

Private universities had a net loss in enrollment of 0.2 per cent, while public universities had an estimated increase of 0.7 per cent. Among four-year institutions other than the Ph.D.-granting universities, the public colleges had a net enrollment loss of 0.6 per cent while the private colleges had a net gain of 0.3 per cent.

SUNY Gains 2.2 Pct.

Fall enrollment reports included the following:

- ▶ The State University of New York reported a record total enrollment of 380,522 on its 64 campuses, an increase of 2.2 per cent over last fall's total.
- ▶ The University of California enrolled 138,700 students on its nine campuses this fall, a systemwide increase of 2.1 per cent over last fall. The California State University system reported total enrollment up 1.7 per cent to 319,262.
- ▶ Georgia's state university system reported a record total enrollment of 132,174, up 4.2 per cent over last fall.
- ▶ The University of Minnesota reported its fall enrollment was up by only 0.3 per cent from a year ago, to 58,903.
- ▶ The Illinois Board of Higher Education reported a statewide increase in enrollment of 5.4 per cent to 752,594. Most of the increase was in community colleges, where enrollment rose 10.2 per cent. Public universities gained 0.1 per cent and private institutions gained 0.9 per cent.
- ▶ The New England Board of Higher Education reported an increase of nearly 4 per cent in total enrollment in the six-state region, but nearly all the increase was attributed to students enrolled part time.

The number of full-time students was essentially unchanged from a year ago, the board said, but the number of part-time students increased by almost 11 per cent.

Since 1977, the board said, part-time enrollment in New England has increased by 63,000 students while the number of full-time students has increased by only 29,000.

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News Summary

Articles on inside pages

The next issue of The Chronicle will be January 6.

The Supreme Court heard arguments last week over whether a federal law barring sex bias at educational institutions covers employees as well as students. Story on Page 11.

Videotaping by colleges would be strictly limited under guidelines adopted by a committee named by Congress. Story on Page 11.

Misuse of federal student-aid funds totaled more than $13-million in a recent six-month period, Congress has been told. Story on Page 11.

Outside earnings of professors in engineering and computer science equaled 38 per cent of their base salaries, the Chronicle Survey shows. Table on Pages 6-7, story on Page 7.

Educational programs on military bases are coming under increasing scrutiny as part of an effort to assure their quality. Story on Page 4.

Faulty construction, much of it on campuses, cost Massachusetts taxpayers $7.7-billion since 1968, a commission has found. Story on Page 9.

A Mississippi plan to eliminate duplication of programs at public universities has sparked concern at some institutions. Story on Page 10.

Screenplays of 16 classic films have been published as part of a series by the University of Wisconsin Press. Story on Page 21.

South African students who oppose apartheid hope to make their universities centers of opposition to government policies. Story on Page 19.

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Supreme Court Rejects University's Ban on Services by Student Religious Group

By CHERYL M. FIELDS

WASHINGTON

The Supreme Court has upheld a student group's right to hold religious services in buildings on a public university campus.

In an 8-to-1 ruling, the Court rejected the University of Missouri's arguments that allowing regular services at a tax-supported institution would violate federal and state constitutional prohibitions against the establishment or advancement of religion.

The decision was handed down in a lawsuit filed by Cornerstone, a nondenominational student group on the university's Kansas City campus, after the institution barred the group from holding religious services in the student center. The organization argued that it was a recognized student group and should be allowed to use university facilities, as all other student organizations are.

The university cited a regulation barring regular religious services on university grounds or in university buildings, and argued it had a "compelling interest" in maintaining strict separation of church and state.

But the Court, upholding a ruling of the U.S. Court of Appeals for the Eighth Circuit, held that the university's policy "violates the fundamental principle that a state regulation of speech should be content-neutral."

"The University of Missouri has discriminated against student groups and speakers based on their desire to use a generally open forum to engage in religious worship and discussion. These are forms of speech and association protected by the First Amendment," said the majority opinion written by Justice Lewis F. Powell, Jr.

"In order to justify discriminatory exclusion from a public forum based on the religious content of a group's intended speech, the university must therefore satisfy the standard of review appropriate to context-based exclusions," said Justice Powell. Thus, the institution, he said, "must show that its regulation is necessary to serve a compelling state interest and that it is narrowly drawn to achieve that end."

Although compliance with the ban on establishment of religion in the federal and Missouri Constitutions can be seen as a compelling interest, Mr. Powell said, an "equal access" policy for student groups would not violate the Constitutions' "establishment" clauses.

An equal-access policy for use of university facilities would help advance the secu-

Continued on Page 14, Column 2

The texts of the opinions in the Supreme Court's decision on campus religious services appear on Pages 14 and 15.

New Limits on NCAA's Top Division Fail to Satisfy Major Football Powers

By LORENZO MIDDLETON

ST. LOUIS

New restrictions on membership in Division I-A of the National Collegiate Athletic Association have reduced the number of teams eligible to play big-time college football by about a third.

But the restrictions have failed to satisfy the College Football Association—a group of 61 institutions with major football programs. The C.F.A. had sought an even greater reduction in the size of the top football division, as well as more autonomy for its members within the N.C.A.A.

The rule changes are likely to result in a move next fall of about 40 of the 137 teams now in Division I-A to Division I-AA. (For a list of the institutions that will be affected, see Page 8.) The move could include some or all of the members of the Ivy League, the Mid-American Athletic Conference, the Missouri Valley Conference, the Pacific Coast Athletic Association, the

Continued on Page 8, Column 1

DICK RAPHAEL

New restrictions could eliminate the Ivy League from membership in the N.C.A.A.'s top division. Above, action in this year's Harvard-Yale game.

Budget Plan Would Slash Student Aid in 1983

By JANET HOOK

WASHINGTON

The Office of Management and Budget has made budget proposals for next year that would slash government subsidies for student loans, drastically curtail financial support for graduate students, and wipe out three other student-aid programs completely.

Those proposals—as well as deep cuts in Pell Grants for poor students—were included in an O.M.B. budget plan for fiscal 1983, sources said.

Overall, the budget office has recommended paring the Department of Education's 1983 budget by more than a third from the approximately $14-billion expected to be provided for the department in fiscal 1982.

The 1983 proposals will be the subject of negotiations between the Department of Education and the White House in the coming weeks, and could be significantly revised before President Reagan submits his 1983 budget request to Congress next month.

The final decisions on the budget for fiscal 1983, which begins next October 1, will not be made until after President Reagan, White House aides, and David A. Stockman, director of the O.M.B., have heard appeals from agency heads, including Education Secretary Terrel H. Bell, who object to the spending recommendations made by the budget office.

Sources close to the budget process say that the O.M.B. has recommended cutting Guaranteed Student Loan costs—which

Continued on Page 16, Column 4

CHRONICLE SURVEY

Faculty Members' Earnings, by Discipline,

Annual income above base salary earned within the institution

Discipline group	Public 4-year institutions			Private 4-year institutions			All institutions		
	Per cent reporting earnings	Average amount of earnings	Per cent of base salary	Per cent reporting earnings	Average amount of earnings	Per cent of base salary	Per cent reporting earnings	Average amount of earnings	Per cent of base salary
Arts (a)									
Professor	47.4%	$3,685	13.4%	47.1%	$3,540	11.7%	46.2%	$3,637	12.8%
Assoc. professor ..	77.3%	2,669	12.0%	62.5%	1,659	7.4%	70.3%	2,429	10.9%
Ass't professor ...	58.3%	2,098	12.0%	50.0%	1,739	9.3%	56.1%	1,876	10.7%
All ranks†	64.3%	2,746	12.9%	51.2%	2,283	8.9%	58.2%	2,563	11.5%
Business (b)									
Professor	67.5%	$6,467	21.3%	58.6%	$5,123	16.8%	65.4%	$5,037	17.7%
Assoc. professor ..	80.8%	5,712	22.8%	86.4%	3,918	15.8%	80.4%	4,840	20.3%
Ass't professor ...	62.5%	4,667	21.3%	71.4%	4,070	20.6%	71.0%	4,083	19.8%
All ranks†	70.2%	5,475	21.1%	68.6%	4,417	17.7%	70.8%	4,566	18.8%
Engineering (c)									
Professor	74.2%	$6,755	21.0%	72.7%	$7,911	26.8%	70.1%	$7,139	22.8%
Assoc. professor ..	63.6%	5,873	23.1%	91.7%	6,482	28.3%	70.3%	5,844	23.5%
Ass't professor ...	—	—	—	—	—	—	78.6%	4,391	20.3%
All ranks†	70.1%	5,832	21.5%	82.1%	7,096	27.5%	72.5%	5,770	22.5%
Humanities (d)									
Professor	42.4%	$3,347	11.7%	64.5%	$2,586	9.9%	55.4%	$3,380	12.8%
Assoc. professor ..	67.6%	4,136	18.6%	68.2%	1,842	9.0%	69.1%	3,796	17.3%
Ass't professor ...	52.4%	2,259	12.5%	52.4%	1,380	8.2%	55.8%	2,047	11.6%
All ranks†	54.3%	3,427	15.2%	65.9%	2,265	10.3%	61.6%	3,176	14.5%
Physical education (e)									
Professor	—	—	—	—	—	—	57.1%	$4,040	16.4%
Assoc. professor ..	—	—	—	—	—	—	82.1%	3,629	16.1%
Ass't professor ...	—	—	—	—	—	—	84.6%	3,470	18.7%
All ranks†	65.4%	$3,979	18.3%	87.0%	$4,076	19.2%	73.0%	3,818	17.7%
Sciences (f)									
Professor	55.7%	$4,807	16.2%	63.9%	$5,003	18.9%	60.8%	$4,688	17.0%
Assoc. professor ..	82.5%	3,952	17.0%	68.2%	2,622	13.2%	76.7%	3,374	15.2%
Ass't professor ...	64.0%	3,593	19.2%	60.0%	3,307	17.3%	60.6%	3,340	17.5%
All ranks†	65.5%	4,404	17.6%	62.5%	3,979	17.3%	65.2%	4,064	17.1%
Social sciences (g)									
Professor	67.4%	$4,402	15.4%	72.7%	$3,909	13.8%	71.6%	$3,877	14.4%
Assoc. professor ..	76.2%	4,142	18.6%	76.0%	3,735	16.7%	72.2%	3,758	17.1%
Ass't professor ...	50.0%	3,926	20.9%	61.5%	2,508	14.5%	60.0%	3,208	17.7%
All ranks†	67.9%	4,099	17.1%	68.4%	3,536	15.4%	67.8%	3,616	15.9%
Vocational education (h)									
Professor	—	—	—	—	—	—	85.0%	$3,115	10.8%
Assoc. professor ..	63.6%	$3,462	15.3%	—	—	—	67.4%	3,447	16.3%
Ass't professor ...	59.4%	3,127	16.4%	69.2%	$2,687	15.4%	65.2%	2,823	[illegible]
All ranks†	63.3%	3,409	15.6%	65.1%	2,767	15.0%	66.5%	3,082	15.1%

Annual income above base salary earned outside the institution

Discipline group	Public 4-year institutions			Private 4-year institutions			All institutions		
	Per cent reporting earnings	Average amount of earnings	Per cent of base salary	Per cent reporting earnings	Average amount of earnings	Per cent of base salary	Per cent reporting earnings	Average amount of earnings	Per cent of base salary
Arts (a)									
Professor	63.2%	$2,386	8.1%	70.6%	$6,751	21.7%	64.1%	$3,837	12.8%
Assoc. professor ..	63.6%	1,682	8.2%	100.0%	3,224	15.4%	67.6%	2,583	12.1%
Ass't professor ...	62.5%	1,857	9.9%	71.4%	1,433	7.6%	63.4%	1,716	9.1%
All ranks†	64.3%	2,243	9.9%	76.7%	4,944	19.3%	64.9%	3,326	14.1%
Business (b)									
Professor	62.5%	$7,532	24.0%	82.8%	$6,834	21.2%	64.2%	$6,010	20.2%
Assoc. professor ..	65.4%	5,915	23.8%	68.2%	7,026	28.3%	66.1%	5,797	24.5%
Ass't professor ...	54.2%	2,993	13.9%	42.9%	2,778	13.7%	48.4%	3,229	15.7%
All ranks†	59.6%	5,830	21.8%	67.4%	5,941	22.8%	60.6%	5,287	21.1%
Engineering (c)									
Professor	87.1%	$4,670	14.9%	72.7%	$4,445	15.0%	80.6%	$4,146	14.0%
Assoc. professor ..	72.7%	6,998	27.8%	91.7%	9,663	41.1%	75.7%	10,489	43.6%
Ass't professor ...	—	—	—	—	—	—	64.3%	3,988	18.8%
All ranks†	76.1%	5,547	20.1%	76.8%	6,945	26.7%	75.4%	6,741	25.9%
Humanities (d)									
Professor	24.2%	$3,163	10.5%	54.8%	$2,324	8.5%	40.5%	$2,425	8.7%
Assoc. professor ..	38.2%	2,716	12.0%	54.5%	669	3.2%	44.1%	2,086	9.5%
Ass't professor ...	47.6%	2,201	12.5%	33.3%	905	6.0%	36.5%	3,217	19.1%
All ranks†	35.1%	2,917	13.0%	48.8%	1,866	8.1%	37.9%	2,628	11.8%
Physical education (e)									
Professor	—	—	—	—	—	—	32.1%	$2,250	8.0%
Assoc. professor ..	—	—	—	—	—	—	32.1%	1,518	6.9%
Ass't professor ...	—	—	—	—	—	—	38.5%	2,377	13.5%
All ranks†	32.7%	$1,499	6.3%	43.5%	$2,497	11.1%	31.5%	2,190	9.8%
Sciences (f)									
Professor	51.4%	$3,715	12.1%	49.2%	$3,566	13.1%	48.3%	$3,968	14.2%
Assoc. professor ..	37.5%	1,979	9.2%	31.8%	4,814	24.6%	35.9%	2,846	13.3%
Ass't professor ...	—	—	—	28.6%	3,347	18.7%	22.7%	2,865	14.9%
All ranks†	39.6%	3,420	12.2%	38.2%	4,020	16.8%	37.1%	3,470	13.6%
Social sciences (g)									
Professor	65.2%	$2,628	8.7%	63.6%	$4,740	15.6%	64.9%	$2,955	10.5%
Assoc. professor ..	69.0%	3,311	14.8%	56.0%	1,115	5.1%	57.0%	2,564	12.0%
Ass't professor ...	31.8%	1,219	6.7%	34.6%	6,378	35.1%	28.3%	2,734	15.5%
All ranks†	59.8%	2,623	10.4%	48.7%	3,844	15.9%	48.7%	2,775	11.8%
Vocational education (h)									
Professor	—	—	—	—	—	—	60.0%	$2,365	7.9%
Assoc. professor ..	50.0%	$4,135	17.8%	—	—	—	55.8%	4,940	23.0%
Ass't professor ...	59.4%	4,280	22.2%	65.4%	2,366	14.3%	62.1%	3,251	17.7%
All ranks†	55.7%	3,461	16.4%	60.5%	3,013	17.0%	58.5%	3,512	17.6%

— Indicates too little data for reliable estimate.
† Includes instructor.
(a) Includes architecture, cinema, dance, music, and theater.
(b) Includes economics.
(c) Includes computer science.
(d) Includes classics, English, languages, journalism, literature, philosophy, religion, and speech.
(e) Includes coaching and recreation.
(f) Includes mathematics.
(g) Includes education.
(h) Includes agriculture, electronic and engineering technology, health, home economics, nursing, occupational and physical therapy, and textiles.
(i) One-fourth of the faculty members reporting other earnings received more than this amount.
(j) One-half of the faculty members reporting other earnings received more than this amount.
(k) One-fourth of the faculty members reporting other earnings received less than this amount.

Programs on Military Bases

Continued from Page 4

Maryland must have their credentials certified and their courses and textbooks approved by the faculty on the College Park campus.

"We even do some things to insure quality on the bases that you couldn't do here at home," he says. "For instance, our overseas faculty members are required to show us their syllabi and their exams. Our administrators visit classes overseas routinely. Here, that would be called a violation of academic freedom, but we can get away with it overseas because we are up front about it. We tell faculty members the rules of the game in advance."

As one quality-control measure, Los Angeles Metropolitan College sends "master teachers" to hold training workshops for adjunct faculty members on the 60 to 80 overseas bases where the college offers associate-degree programs, says President David B. Wolf.

Military installations that are concerned about the qualifications of adjunct faculty members might be able to attract full-time faculty members from the home campus if they would provide opportunities for research, says Clive L. Grafton, chairman of the Department of Higher and Postsecondary Education at the University of Southern California, which offers several master's-degree programs for the armed forces.

"A full-time faculty member selected for a distant learning center is in a position to be 'punished' for his involvement there unless he has some means of performing research, because his promotion depends on research," he says. "If faculty members could study problems on military bases, they would not be damaged by being unable to do research while abroad."

President and Janitor

Besides seeking to insure the quality of teachers, some military services are establishing professional-development programs for their education officers, says Richard McMullen, a civilian personnel official at Randolph Air Force Base in Texas.

"The education service officer *is* the college on the base, from the president to the janitor," he says. "He is involved with admissions, registration, programs, faculty, and facilities. He needs to know as much about a college's business as the college does."

Mr. McMullen says some of the new programs include sending military education officers "out on career-development assignments, such as a one-year internship with a major college or a regional accrediting agency. This way, the officers can see from the other side why they run into the problems they do when they ask a college to do something."

Ronald Violette, director of the University of Southern California's on-base graduate programs in safety and systems management, says college administrators and military education officers often don't understand each other's problems.

For instance, he says, "an education service officer will come to us and say, 'We have a number of students for the safety program.' What really happens is that they have four or five very vocal people, but not enough to start or sustain a program. They don't know that we need two times the number of potential students to get half to open a program. We don't want to go in with a program for one or two years and run out of students."

Mr. Violette says adequate classroom facilities for military students remain a problem.

"Lots of times the classrooms the base offers aren't good enough. Sometimes you promise a program when the education officer indicates that better classrooms will be available later, and then that doesn't happen. Some places are awful and we should never go there."

Ignoring Whistles and Sirens

J. D. Smith, head of planning and programs for Navy Campus for Achievement, which manages the voluntary off-duty education program provided by the Navy, says too much emphasis is placed on providing "adequate" facilities for classes.

He says one of the first things students and shipboard faculty members learn in the Navy's PACE program—Program of Afloat College Education—is to concentrate, in spite of whistles and sirens, in the cramped quarters of submarines and other Navy vessels. "They don't even hear the noise," he says.

Some conditions that plague those who offer educational programs on military installations may never be resolved.

Secret Maneuvers

The fact that "military students move around so much can wreak havoc with your budget and your class schedules," says Mr. Wolf of Los Angeles Metropolitan College, which was established in 1979 to provide programs for certificates in technical subjects and associate degrees in academic subjects exclusively to the armed forces.

"Despite what you forecast when you sign a contract to offer a program, some things happen that are out of everyone's control.

"For example, when the president of Korea was assassinated, the Army went on alert. There were no soldiers in the classrooms.

"When the military performs secret maneuvers, they don't tell us. Within three weeks everyone can be shipped out. Then we have to refund the tuition and we have no revenue from the program. Of course, sometimes units we didn't expect are shipped in. Then we have to make a new class schedule and we get more revenue than we predicted."

Beyond Their Basic Salaries in 1980-81

Total annual income above base salary

Discipline group	Public 4-year institutions			Private 4-year institutions			All institutions		
	Per cent reporting earnings	Average amount of earnings	Per cent of base salary	Per cent reporting earnings	Average amount of earnings	Per cent of base salary	Per cent reporting earnings	Average amount of earnings	Per cent of base salary
Arts (a)									
Professor	84.2%	$3,835	13.7%	82.4%	$7,969	26.1%	79.5%	$5,210	18.1%
Assoc. professor ..	95.5%	3,624	16.5%	100.0%	4,525	21.6%	89.2%	4,250	19.6%
Ass't professor ...	79.2%	3,022	16.6%	71.4%	2,993	15.9%	75.6%	2,687	15.0%
All ranks†	87.1%	3,623	16.4%	81.4%	6,198	24.2%	80.6%	4,475	19.7%
Business (b)									
Professor	82.5%	$11,240	37.0%	96.6%	$9,312	29.6%	86.4%	$8,799	30.5%
Assoc. professor ..	88.5%	9,879	40.0%	90.9%	8,767	35.6%	87.5%	8,872	37.9%
Ass't professor ...	79.2%	6,086	27.7%	85.7%	5,162	25.8%	83.9%	5,512	26.6%
All ranks†	83.0%	9,066	34.9%	91.9%	7,860	30.8%	86.7%	7,747	31.7%
Engineering (c)									
Professor	93.5%	$9,710	30.9%	81.8%	$11,141	38.1%	88.1%	$8,535	29.0%
Assoc. professor ..	90.9%	10,127	40.0%	100.0%	14,836	63.7%	91.9%	11,866	46.4%
Ass't professor ...	—	—	—	—	—	—	96.4%	6,794	32.6%
All ranks†	92.5%	8,849	33.0%	89.3%	12,544	48.7%	91.3%	9,724	38.1%
Humanities (d)									
Professor	51.5%	$4,553	15.7%	80.6%	$3,712	14.0%	67.6%	$4,244	15.7%
Assoc. professor ..	73.5%	5,170	23.5%	86.4%	2,119	10.3%	79.4%	4,595	21.1%
Ass't professor ...	81.0%	2,845	16.0%	61.9%	1,449	9.1%	75.0%	2,703	15.4%
All ranks†	66.0%	4,421	19.8%	79.3%	3,169	14.0%	73.2%	4,096	18.6%
Physical education (e)									
Professor	—	—	—	—	—	—	71.4%	$4,115	16.2%
Assoc. professor ..	—	—	—	—	—	—	85.7%	4,096	18.3%
Ass't professor ...	—	—	—	—	—	—	88.5%	4,174	22.4%
All ranks†	75.0%	$4,048	17.9%	91.3%	$5,299	25.0%	79.8%	4,299	19.6%
Sciences (f)									
Professor	80.0%	$5,748	19.1%	83.6%	$6,488	24.0%	81.1%	$5,932	21.2%
Assoc. professor ..	90.0%	4,535	19.6%	81.8%	4,142	20.9%	85.4%	4,374	19.8%
Ass't professor ...	68.0%	3,830	20.5%	71.4%	4,520	25.3%	69.7%	3,925	20.9%
All ranks†	80.6%	5,201	20.1%	78.5%	5,335	23.3%	78.9%	5,136	21.1%
Social sciences (g)									
Professor	89.1%	$5,350	18.0%	86.4%	$6,808	23.8%	89.2%	$5,335	19.4%
Assoc. professor ..	90.5%	5,701	25.4%	96.0%	3,367	15.0%	88.6%	4,464	20.3%
Ass't professor ...	63.6%	3,562	19.1%	73.1%	4,396	25.5%	70.0%	3,564	19.8%
All ranks†	84.8%	5,078	20.6%	82.9%	5,199	22.7%	81.7%	4,640	20.2%
Vocational education (h)									
Professor	—	—	—	—	—	—	90.0%	$4,909	17.0%
Assoc. professor ..	77.3%	$5,419	23.5%	—	—	—	81.4%	6,528	30.6%
Ass't professor ...	78.1%	5,667	29.6%	84.6%	$4,398	26.1%	81.8%	4,846	26.6%
All ranks†	79.7%	5,088	23.6%	81.4%	4,823	27.2%	82.3%	5,190	25.8%

Quartile distribution of total income above base salary

Discipline group	Public 4-year institutions			Private 4-year institutions			All institutions		
	High (i)	Median (j)	Low (k)	High (i)	Median (j)	Low (k)	High (i)	Median (j)	Low (k)
Arts (a)									
Professor	$3,200	$3,000	$2,000	$6,300	$3,500	$1,350	$5,200	$3,089	$1,350
Assoc. professor	5,078	2,700	1,500	6,000	4,503	2,600	5,833	3,500	2,500
Ass't professor	4,000	2,700	1,700	4,645	3,000	1,500	4,000	3,000	1,500
All ranks†	4,500	3,000	1,900	5,200	3,000	1,350	5,078	3,000	1,500
Business (b)									
Professor	$13,200	$7,700	$5,000	$15,708	$8,000	$3,500	$15,000	$7,000	$3,000
Assoc. professor	11,500	7,000	4,800	12,000	7,000	3,000	12,000	6,800	4,000
Ass't professor	9,800	4,800	2,500	6,500	2,500	1,000	6,900	3,600	1,500
All ranks†	11,500	6,500	4,200	10,000	5,000	2,000	10,000	6,000	2,250
Engineering (c)									
Professor	$13,342	$10,000	$6,000	$15,000	$12,000	$8,225	$14,522	$12,000	$6,000
Assoc. professor	12,000	8,900	5,575	25,500	7,400	5,500	15,000	8,900	5,500
Ass't professor	—	—	—	—	—	—	7,000	4,300	2,700
All ranks†	12,500	8,000	5,000	14,522	9,300	5,500	13,342	8,900	5,000
Humanities (d)									
Professor	$4,000	$2,800	$1,800	$4,571	$2,765	$1,500	$4,800	$2,800	$1,750
Assoc. professor	8,000	3,700	2,400	3,350	1,900	1,150	4,500	2,500	1,500
Ass't professor	3,700	1,340	520	2,700	1,300	600	3,400	1,450	600
All ranks†	5,000	3,000	1,340	3,700	2,250	1,400	4,000	2,450	1,400
Physical education (e)									
Professor	—	—	—	—	—	—	$6,725	$4,100	$1,400
Assoc. professor	—	—	—	—	—	—	6,000	3,000	2,000
Ass't professor	—	—	—	—	—	—	6,000	3,300	1,455
All ranks†	$5,750	$3,867	$2,000	$6,000	$2,700	$1,475	6,000	3,300	1,800
Sciences (f)									
Professor	$8,034	$5,619	$3,000	$7,200	$3,500	$1,700	$8,034	$4,100	$2,000
Assoc. professor	7,000	4,500	3,000	4,500	2,000	1,200	5,000	3,000	1,560
Ass't professor	4,242	3,500	2,500	5,000	3,200	1,000	5,000	3,200	1,275
All ranks†	7,031	4,500	3,000	5,044	3,000	1,500	6,000	3,500	1,750
Social sciences (g)									
Professor	$6,400	$4,600	$2,500	$5,000	$4,200	$1,500	$6,400	$4,400	$1,900
Assoc. professor	6,100	4,084	2,500	4,850	2,800	1,200	5,500	3,000	1,700
Ass't professor	5,000	4,000	1,869	8,800	3,000	1,025	5,500	3,330	1,050
All ranks†	6,300	4,084	2,500	5,500	2,800	1,200	5,843	3,330	1,800
Vocational education (h)									
Professor	—	—	—	—	—	—	$8,956	$5,180	$2,300
Assoc. professor	$6,400	$4,000	$1,250	—	—	—	7,300	4,025	1,700
Ass't professor	6,200	3,125	1,200	$5,100	$3,685	$2,100	5,500	3,300	2,100
All ranks†	6,000	3,125	1,600	5,500	3,685	2,100	6,000	3,700	2,000

Note: Survey data are based on responses of 4,319 individuals, weighted to represent full-time faculty members on nine-month contracts at colleges and universities of all types except law and medical schools, proprietary institutions, private two-year colleges, and colleges with fewer than 500 students. Faculty members in the group from which the sample was drawn were those who offered courses in the fall of 1980. Those hired for their first faculty jobs in the fall of 1981 were not included. Salary figures do not include the value of contributed services of members of religious orders or others. There is a 95-per-cent probability that the average amount of extra earnings for members of arts faculties, of all ranks at all institutions, are within $325 of the average found in the sample. Confidence intervals for other salary averages are included in a technical report on survey design and sampling statistics that will be available from John Minter Associates late in January. Specific questions may be addressed to John Minter Associates, P.O. Box 107, Boulder, Colo. 80306.

SOURCE: SURVEY FOR THE CHRONICLE BY JOHN MINTER ASSOCIATES

Whitehead Center for Biomedicine Approved at MIT

CAMBRIDGE, MASS.

The M.I.T. Corporation has formally approved the affiliation of the Massachusetts Institute of Technology with a multimillion-dollar biomedical-research center to be financed by Edwin C. Whitehead, an industrialist and philanthropist from Greenwich, Conn.

In addition to providing $20-million for construction and equipment of the facility, which will have 130,000 square feet of laboratory and office space, Mr. Whitehead has established a $60-million trust fund that will distribute $5-million annually for its operation.

He has provided that upon his death the institute will receive a $100-million endowment.

He has also made a $7.5-million gift to M.I.T. which, a spokesman said, will be used as an endowment to support teaching and research in the academic departments of the professors who will also have appointments at the institute.

Under the agreement, research scientists will hold joint appointments on the M.I.T. faculty and the Whitehead Institute staff. Up to 13 Whitehead scientists are expected to receive appointments as assistant, associate, or full professors at M.I.T. during the first eight years of affiliation.

In addition to their duties at Whitehead, the scientists will have full undergraduate and graduate teaching responsibilities as well as faculty-committee duties at M.I.T.

The Whitehead Institute will be directed by David Baltimore, a cancer specialist at M.I.T. and 1975 Nobel laureate for his work on molecular genetics.

Those appointed to the board of directors by M.I.T. are Jerome B. Wiesner, former M.I.T. president; Abraham J. Siegel, dean of the Sloan School of Management at M.I.T.; and W. Gerald Auste, chief of surgical services at the Massachusetts General Hospital and member of the M.I.T. Corporation.

Mr. Whitehead, founder of Technicon Corporation, now a subsidiary of Revlon Inc., said his wealth had come from the development of medical technologies, and he felt obliged to contribute some of it to basic research.

Engineers, Computer Scientists Add 38 Pct. to Pay from Outside Earnings, Survey Shows

Faculty members in engineering and computer science had extra earnings equal to 38 per cent of their nine-month base salaries, according to the Chronicle Survey.

Fewer than 9 per cent of them reported no extra earnings during the year. The extra earnings came from consulting fees and extra teaching, research, and administrative assignments.

Engineering and computer science are areas in which shortages of faculty members have been widely reported, despite salaries and extra income that exceed the averages for other disciplines.

Faculty members of all ranks in engineering and computer science this year are receiving base salaries averaging $27,535 for nine months, compared with $24,834 for faculty members in all disciplines. Their pay increases this year averaged 10.1 per cent, compared with 8.9 per cent for faculty members generally. Their extra earnings beyond base salary averaged $9,724 last year, compared with an overall average of $5,756.

Contrary to the general pattern, in engineering and computer science, associate professors have higher outside earnings, on the average, than full professors.

At private institutions, the associate professors' average extra earnings of $14,836 compared with the full professors' $11,141.

Virtually all associate professors in engineering and computer science at private institutions reported some income beyond their base salary during 1980-81, but about 18 per cent of the full professors in the same disciplines reported no extra earnings.

Faculty members who reported no extra earnings were not included in the survey's calculation of average amounts.

Extra earnings of faculty members in engineering and computer science at public four-year institutions were substantially lower, on the average, than those of their colleagues in private institutions. The averages for faculty members of all ranks in engineering and computer science were $8,849 at public institutions, $12,544 at private institutions.

In the humanities, the average outside income for faculty members was $4,096; in the arts, $4,475; in the social sciences, $4,640; in science and mathematics, $5,136; and in business and economics, $7,747.

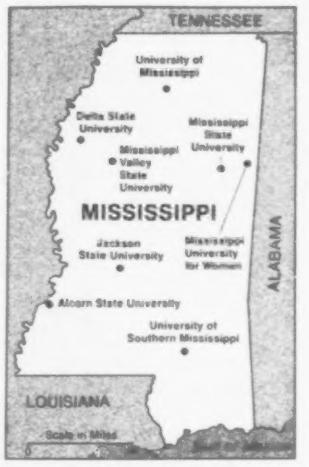
The extra income reported in the survey includes only earnings from professional work, either inside or outside the institutions that pay the faculty members' base salaries. It does not include income from such sources as rents or investments.

The data on extra earnings by discipline was part of a survey of faculty income, conducted for *The Chronicle* by John Minter Associates of Boulder, Colo.

The survey gathered information from more than 4,000 individual faculty members in a national sample.

—JACK MAGARRELL

Mississippi Board Limits Academic Missions of Its 8 Universities; 9 Programs Cut So Far


TENNESSEE
University of Mississippi
Delta State University
Mississippi State University
Mississippi Valley State University
MISSISSIPPI
Jackson State University
Mississippi University for Women
ALABAMA
Alcorn State University
University of Southern Mississippi
LOUISIANA
Scale in Miles

CHRONICLE MAP BY PETER H. STAFFORD

JACKSON, MISS.

In an attempt to eliminate duplication, the board that governs Mississippi's eight public universities has decided to limit each of the institutions to specific academic areas—a move that has aroused concern on some of the campuses.

The plan is expected to produce wide-ranging changes in curricula and may alter the character of some universities within the next few years.

Nine programs, mostly in the liberal arts, have already been eliminated at six universities. Administrators at those institutions said they were worried about future cuts.

Administrators on other campuses, however, said it was too early to know what the impact of the reorganization plan would be.

An academic officer at Jackson State University, which was assigned a general urban role in the board's plan, said the predominantly black university would "operate in good faith" until the trustees could clarify the definition of its mission.

"If the board's plan means that Jackson can develop programs in social work, urban planning, advertising, journalism, and other such areas, that will be great," said Estus Smith, vice-president for academic affairs. "If it means that Jackson will be restricted, that would hurt us."

3 Comprehensive Universities

Under the reorganization plan, the three major higher-education institutions—the University of Mississippi, the University of Southern Mississippi, and Mississippi State University—will be "comprehensive" universities offering programs that will specialize in broad academic areas that will be different for each institution. They will continue to offer courses in the specialties assigned to other universities, but may not expand them. The three institutions will offer doctoral programs and conduct research.

The board said the University of Mississippi would be predominantly a liberal-arts institution, the University of Southern Mississippi would emphasize science and technology, and Mississippi State University would concentrate on programs in agriculture, architecture, biological science, engineering, and veterinary medicine.

Four institutions—Alcorn State, Delta State, and Mississippi Valley State Universities and Mississippi University for Women—will be "regional" universities, restricted primarily to undergraduate education. They will continue their present graduate programs, pending review and accreditation decisions, but they may not establish any new ones.

Jackson State will be an "urban" university. According to the plan, the institution is to "develop a broader mission . . . directly related to its urban role," improve its overall academic quality, and raise admissions standards to reduce the number of "marginal students." The university will also be expected to conduct research "directly related to the urban area of Jackson," the state capital, according to the plan.

During the next 2½ years, the board will review about 700 baccalaureate and master's-degree programs in the eight universities to decide which will be continued, expanded, or terminated. The state's 62 doctoral programs, which were reviewed between 1976 and 1979, will not be included in the assessment.

The board has said that proposals for new programs outside of a university's assigned academic areas will require "extraordinary justification." It has also said that it will not consider requests for new programs from any institution until all programs eligible for accreditation have been accredited.

The board's plan, which has been studied and debated for at least seven years, was supported by many university presidents and chief academic officers, who felt that the proliferation of duplicate programs over the last decade had affected the quality of higher education at the state institutions.

"Trying to provide a full range of programs at all levels at each institution has resulted in a dilution of resources for some programs and quality has suffered," said Thomas Meredith, the board's associate director for programs and planning.

'Victims of Growth Syndrome'

The state universities "have been victims of the growth syndrome, which says that unless you are growing and expanding you are not accomplishing much," said Porter L. Fortune, Jr., chancellor of the University of Mississippi. "Revenues are not increasing today like they did in the past. The austerity we face necessitates that we re-evaluate our programs. We need to zero in on areas where there is a degree of excellence and try to make them better, and get over spending so much money."

The first program cuts, which included six programs in French, one in English, and two in chemistry, have alarmed some educators.

"Losing French affected us greatly," said Mr. Smith of Jackson State, one of five universities where French programs were curtailed.

"All of our liberal-arts and doctoral students are required to take some foreign language. Losing French restricts their options to Spanish, which is not always considered a legitimate language for the doctorate, and to German, the hardest option."

Barbara C. Dease, head of the department of modern foreign languages at Jackson State, said she was afraid that the cuts in French would be followed by reductions in other language programs. "This program review affected only French, but surely you can read the handwriting on the wall," she said.

Ms. Dease said that for the time being, no foreign-language faculty members were likely to lose their jobs. "Everyone at Jackson State teaches one over the approved number of classes now," she said. "We will just drop back to the approved number, where we should be anyway."

John Thornell, director of research at Delta State, which lost three programs after the initial review, said his university was "fearful that future decisions about programs will adversely affect the institution."

He said, "One major concern is that the board will rely on numbers of graduates to decide if a program could be deemed viable. We don't think numbers reflect the need for programs. In history, for example, Delta doesn't have a large number of graduates—maybe four or five a year—but the viability of the institution requires that a baccalaureate in history be an option."

He said Delta was also worried about the board's requirement that all programs eligible for accreditation be accredited before a university can propose a new program.

"Our school of business is not accredited," he said. "For some small institutions, it is not feasible to seek accreditation. The criteria are targeted on larger research institutions.

"We have always added business programs based on student demand. If we can't add programs, our business students will be hurt."

—BEVERLY T. WATKINS

FACT-FILE

Countries with Largest Number of American Students, 1979-80

Rank	Country	Number of study-abroad students	Per cent of all study-abroad students	Number of programs
1.	United Kingdom	5,699	19.1%	162
2.	France	3,726	12.5%	106
3.	Italy	2,160	7.2%	46
4.	West Germany	2,009	6.7%	59
5.	Spain	1,650	5.5%	52
6.	Mexico	1,640	5.5%	35
7.	Israel	1,008	3.4%	26
8.	Austria	897	3.0%	34
9.	Denmark	679	2.3%	12
10.	Switzerland	319	1.1%	10
11.	Japan	259	0.9%	30
12.	U.S.S.R.	242	0.8%	11
13.	Argentina	214	0.7%	1
14.	Ireland	205	0.7%	11
15.	Colombia	175	0.6%	4
16.	Costa Rica	154	0.5%	7
17.	India	104	0.3%	21
18.	Luxembourg	97	0.3%	1
19.	Hong Kong	85	0.3%	3
20.	Canada	80	0.3%	5
21.	Greece	80	0.3%	5

SOURCE: INSTITUTE OF INTERNATIONAL EDUCATION

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News

Unicorn hunting has generated some fun and perhaps some profit at Lake Superior State College. Story on Page 5.

One battle between big-time-football institutions and the N.C.A.A. has ended, but others loom over lucrative TV contracts. Story on Page 6.

The Association of Intercollegiate Athletics for Women could go out of business if it loses a legal challenge to women's championships planned by the N.C.A.A. Story on Page 6.

Literature on the Holocaust must be taught to assure that the lessons of that tragedy are not lost, according to several speakers at last week's meeting of the Modern Language Association. Story on Page 8.

The Reagan Presidency could have a profound effect on American politics, say scholars who have analyzed the President's first year. Story on Page 8.

Departments of economics have been urged to abandon the "smorgasbord" of electives they offer their majors. Story on Page 9.

The Attorney General will rule soon on a controversial proposal to redefine what constitutes federal financial aid under three civil-rights laws. Story on Page 11.

Pell Grants for the poorest students will rise to $1,800 under an appropriations measure signed by President Reagan. Story on Page 11.

Jonathan Spence, a historian said to stand alone in the field of Chinese studies, has published a new book on intellectual life in China from 1895 until 1980. Story on Page 17.

Right-wing French intellectuals have begun an effort to fight what they see as ideological domination by the left. Story on Page 15.

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Academic Life in Poland Devastated by Arrests, Shutdown of Universities

Many students and teachers interned under martial law; others go underground

UPI POLFOTO

Military vehicles mass in front of the Polish Academy of Sciences. Most of its staff members, as well as many people at the nearby University of Warsaw, were arrested.

By SUE MASTERMAN

WARSAW

Poland's universities and other institutions of higher education have been closed indefinitely and many students and faculty members have been arrested or have gone underground in the wake of the imposition of military rule on December 13.

As an academic grapevine began to function after the initial shock caused by the government's action, it became apparent that those interned included not only students and faculty members affiliated formally or informally with Solidarity, the independent trade union, but representatives of a wide range of student and academic organizations, even including the Communist Students' Union.

By the end of the first week of military rule, it was clear that virtually all of Poland's student and faculty leaders had been directly affected by the crackdown.

Students who were willing to talk to Western reporters said they believed academic life in Poland would never be the same again.

Riot police arrived at the campus of Warsaw University on the morning of December 14 and drove students from the grounds. Policemen could be seen herding students into trucks. It became a depressingly familiar sight to see unarmed students, some with bleeding noses or cuts, running from riot troops.

Many student leaders simply disappeared. Their friends had no way of knowing whether they had been arrested or had fled.

A large group of university faculty members active in the movement to democratize academic life reportedly were interned.

Academy Staff Arrested

On December 15, a group of students managed to return to the campus of the University of Warsaw and tried to lock themselves inside the administration building. They were rounded up and carried off to unknown destinations by the security police.

Later that day, a woman student hung a sign reading "Down with the Junta" on the locked university gates. She waited beside it until she and the sign were removed by police.

The same day, the police arrested almost all of the academic staff at the nearby Polish Academy of Sciences.

It was—and still is—difficult to know who has gone underground and who has been interned. Families are tightlipped about people's whereabouts. The lists of those interned published by government authorities are unreliable, since the first one contained the names of two dissidents who are now living in Paris.

However, on the first night of military rule, the security police did their best to round up as many members as possible of the Workers Self-Defense Movement—known by its Polish acronym KOR. KOR was officially dissolved at Solidarity's annual congress last fall, but its members have remained active both in Solidarity and in the general campaign for democratization in Poland.

The police also rounded up as many members as they could find of KIK, a group of Roman Catholic intellectuals, many of whom had served as advisers to Solidarity.

It is almost certain that Jacek Kuron and Adam Michnik, two founding members of KOR who had worked closely with Solidarity, were arrested and interned.

Czeslaw Milosz, the 1980 Nobel laureate in literature now teaching at the University of California at Berkeley, and several other Polish academics living abroad have said that they have reliable information that Mr. Kuron and Mr. Michnik have been abused and tortured and that their lives are in danger.

According to reports confirmed by members of the clergy—perhaps the best source of information now available in Po-

Continued on Page 16, Column 1

Note

Sue Masterman, The Chronicle's Vienna correspondent, was in Warsaw from December 8 until December 23. She filed this story last week after her return to Vienna.

Plan at Berkeley Would Modify Education School

By JACK McCURDY

BERKELEY, CAL.

Half of the faculty members in the school of education at the University of California at Berkeley would be transferred elsewhere on the campus under a proposed reorganization plan.

An earlier proposal by a faculty committee to disband the school entirely has been rejected by Stephen S. Weiner, assistant vice-chancellor of the university and acting dean of education.

Instead, Mr. Weiner, who spent five months studying the school's future, has sent a series of recommendations to Chancellor Ira Michael Heyman that, he said, would set clearer priorities for the school and enhance its commitment to quality.

Specific Recommendations

Under his plan, no faculty members would lose their jobs, but a few teaching supervisors and nonacademic employees could be laid off, Mr. Weiner said. These are among his specific recommendations:

- ▶ Of the school's 38 faculty members with tenure or in jobs leading to tenure, 30 per cent would be moved to a new and separate department of educational psychology, and 20 per cent would be reassigned to other academic departments.
- ▶ A number of faculty members in the arts and sciences would be given joint appointments in education and could eventually become a voting majority within the school on policy, appointments, and promotions.
- ▶ A new Institute of Education would be created within the school to foster research and public service and to encourage contacts with elementary and secondary schools.
- ▶ The school's name would be changed to the "faculty of education," and its dean would be given broader powers in setting its policies, programs, and budget.

The faculty would continue to offer a Ph.D. in education but would drop the Ed.D., which, Mr. Weiner said, has become a "second-class degree."

Chancellor Heyman is expected to respond to Mr. Weiner's recommendations this month.

James Guthrie, a professor of education, said that while many faculty members in education opposed some of Mr. Weiner's recommendations, they also felt they had "won" the battle to preserve the school itself.

Joint Appointments for Faculty

Last summer, a committee named by the university's academic senate sharply criticized the quality of the school's faculty and its programs, and recommended that it be dismantled.

Martin Trow, professor of sociology and chairman of the senate, said last month that Mr. Weiner's recommendations would address many of the criticisms of the school contained in the faculty committee's study.

He said the success of Mr. Weiner's plan would depend largely on whether faculty members from other disciplines would be willing to accept joint appointments in the school of education. If a significant number were willing, he added, the senate probably would support the organizational changes proposed by Mr. Weiner.

Under those changes, the school would concentrate on four instructional areas—language and literacy, science and mathematics, educational foundations and management, and higher education. Many of the faculty members who would be transferred to other departments do not have interests directly related to those four areas, Mr. Weiner said.

"At present, the interests in the school are spread over too wide a territory," he added. "It has tried to be all things to all people."

FACT-FILE

Average Faculty Benefits in 1980-81

	Institutions reporting benefits	Professors	Per cent covered	Associate professors	Per cent covered	Assistant professors	Per cent covered	Instructors	Per cent covered	All ranks*	Per cent covered
All institutions											
Retirement total	2,398	$3,226	—	$2,222	—	$1,728	—	$1,351	—	$2,289	—
Vested within 5 years	1,967	3,304	83.0%	2,216	79.7%	1,712	72.2%	1,325	57.8%	2,339	75.6%
Vested after 5 years	705	2,850	17.2%	2,245	19.3%	1,786	19.5%	1,411	24.5%	2,103	20.2%
Hospitalization	2,442	754	96.7%	706	95.9%	649	93.8%	605	88.6%	739	95.2%
Disability	1,394	139	61.7%	123	59.6%	111	55.2%	104	45.8%	129	58.0%
Tuition plans	963	2,315	10.1%	1,782	6.3%	1,377	4.2%	985	4.5%	1,670	6.7%
Housing plans	78	1,543	0.8%	1,324	0.4%	1,097	0.6%	959	0.4%	1,353	0.5%
Social Security	2,163	1,545	86.4%	1,392	86.4%	1,158	87.5%	929	84.8%	1,313	82.6%
Unemployment compensation	2,405	142	95.8%	138	95.1%	137	94.6%	138	93.5%	140	94.6%
Group life insurance	1,952	153	79.8%	124	80.4%	106	79.3%	90	75.8%	123	79.6%
Workers' compensation	2,389	117	95.5%	91	94.8%	74	94.4%	59	92.3%	100	94.3%
Other	69	835	4.0%	830	4.4%	801	4.8%	763	4.5%	848	4.1%
Overall average	2,501	6,038	99.9%	4,629	99.9%	3,663	99.8%	2,830	99.5%	4,541	99.8%
Public											
Retirement total	1,379	$3,438	—	$2,413	—	$1,875	—	$1,441	—	$2,415	—
Vested within 5 years	1,025	3,585	79.0%	2,442	76.3%	1,885	72.7%	1,430	64.2%	2,501	74.4%
Vested after 5 years	595	2,934	22.9%	2,326	25.2%	1,847	26.6%	1,464	32.6%	2,166	25.8%
Hospitalization	1,389	803	97.5%	747	97.2%	692	95.5%	652	91.3%	791	96.8%
Disability	656	149	54.3%	128	52.0%	116	49.3%	106	42.0%	136	52.8%
Tuition plans	263	565	3.6%	524	3.4%	488	2.7%	380	3.8%	414	3.9%
Housing plans	4	2,216	—		—	1,468	0.1%	1,331	0.1%	1,491	—
Social Security	1,091	1,565	82.2%	1,427	82.1%	1,191	83.0%	955	79.6%	1,341	77.4%
Unemployment compensation	1,308	132	94.5%	128	93.6%	126	92.8%	130	91.4%	131	93.1%
Group life insurance	1,096	152	75.4%	126	77.6%	110	77.6%	94	76.5%	124	77.6%
Workers' compensation	1,295	121	94.1%	93	93.3%	75	92.5%	58	90.3%	105	92.7%
Other	47	846	5.6%	850	6.0%	834	6.7%	796	6.1%	870	5.4%
Overall average	1,399	6,079	100.0%	4,790	99.9%	3,913	99.9%	3,113	99.7%	4,680	99.9%
Private											
Retirement total	1,019	$2,686	—	$1,699	—	$1,312	—	$ 943	—	$1,872	—
Vested within 5 years	942	2,730	92.8%	1,729	87.9%	1,333	71.2%	970	43.1%	1,915	78.8%
Vested after 5 years	110	1,483	3.4%	1,145	4.6%	954	4.2%	741	5.9%	1,150	4.7%
Hospitalization	1,053	633	94.7%	598	92.7%	550	90.0%	485	82.3%	585	91.0%
Disability	738	123	79.5%	115	78.4%	105	67.9%	100	54.6%	113	72.3%
Tuition plans	700	2,895	25.8%	2,548	13.7%	2,065	7.5%	1,852	6.1%	2,603	14.5%
Housing plans	74	1,538	2.6%	1,324	1.4%	1,059	1.7%	895	1.2%	1,348	1.8%
Social Security	1,072	1,504	96.6%	1,319	97.1%	1,096	97.2%	881	96.5%	1,252	96.9%
Unemployment compensation	1,097	165	98.8%	163	98.8%	160	98.6%	154	98.2%	162	98.7%
Group life insurance	856	154	90.4%	117	87.4%	98	83.0%	79	74.4%	119	84.9%
Workers' compensation	1,093	108	98.9%	87	98.7%	73	98.4%	62	96.9%	86	98.5%
Other	22	387	0.3%	258	0.5%	238	0.9%	235	0.9%	270	0.6%
Overall average	1,102	5,939	99.8%	4,228	99.7%	3,124	99.4%	2,180	99.1%	4,157	99.6%

— Not reported

* Also includes lecturers and faculty members without academic rank

SOURCE: NATIONAL CENTER FOR EDUCATION STATISTICS

2 Surveys Find Job Opportunities Good for Engineers

Engineering and computer-science majors in the class of 1982 will have the best chances of getting job offers, two surveys have found.

A report based on one of the surveys, undertaken by Northwestern University's placement office, concludes that job opportunities for members of the class of 1982 will increase by 11 per cent over the number available to last year's graduates.

Results of the other survey, conducted by the placement office at Michigan State University, are less optimistic. They indicate that the overall demand will be "about the same as last year, when 87 per cent of the graduates found work within three months of graduation."

The Northwestern report estimates that starting salaries for graduates will increase by 9.2 per cent this year, while the Michigan report put the increase at only 5.2 per cent.

Jack Shingleton, Michigan State's director of placement services, said his survey had found "pockets of high demand. In some areas of engineering and computer science, for instance, there will be more jobs to fill than there will be graduates to fill them."

The highest starting salaries, the Michigan survey found, will be paid to chemical, electrical, and mechanical engineers, who will earn an average of more than $22,000 per year. Computer-science majors will earn $19,763.

Social-science majors, at the bottom of the scale, will earn an average of only $14,112. Education majors will earn $15,114. Along with liberal-arts majors, education and social-science graduates will be recruited more slowly than other members of the class of 1982, the report says.

The Michigan survey asked: "In your organization, do liberal-arts and social-science majors reach parity in salary and job classification with technical graduates five to ten years after graduation?" Only about half the employers responded to this question; of those, 48 per cent answered Yes and 52 per cent answered No.

Starting salaries for employees with master's degrees will average $23,303, while doctoral graduates will earn $27,375, the Michigan report predicts.

The Northwestern report, prepared in part by the university's emeritus placement director, Frank S. Endicott, who has done similar studies since 1945, took note of "a somewhat optimistic business outlook for 1982."

"Two major industry groups were quite positive about the coming year—defense and energy. Companies in construction-related fields and the automotive industry report uncertainty about the first part of the year but are optimistic about later months," the report says.

"We didn't expect such a positive outlook," said Victor R. Lindquist, the current director of Northwestern's placement center and co-author of the report. "Nor did we expect so many respondents to indicate an increased demand for '82 college graduates and willingness to pay more to get them."

Almost 60 per cent of the companies repsonding to Northwestern's questionnaire said they would be hiring more graduates this year than in 1981. About 30 per cent said they would be hiring fewer graduates.

Almost all of the personnel officers surveyed by Northwestern said they were pleased by "the preparedness and performance of most college graduates." But, the report said, "graduates at all levels, particularly the M.B.A., were unrealistic about salaries and the rate at which they will be advanced through the ranks."

The second most common complaint, offered by about 25 per cent of the personnel officers, was that too many graduates could not express themselves well, either orally or in writing. —LAWRENCE BIEMILLER

Rockefeller to Aid Minority-Group Women

NEW YORK

Trustees of the Rockefeller Foundation have approved a new program to help single, minority-group women who head households.

Officials of the foundation said the program represented an increase in total grants and would not divert funds earmarked for university programs.

"Some of the most intractable problems of poverty in our country are associated with minority-group families headed by women," said Richard W. Lyman, former president of Stanford University, who became president of the Rockefeller Foundation in 1980.

"We also want to underscore the foundation's commitment to poor blacks and to Hispanics at a time when their plight ranks relatively low on the national agenda," he said.

The foundation trustees approved a plan to give $1.75-million in first-year matching grants to selected community organizations that have shown an ability to train women for jobs.

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News Summary

Articles on inside pages

Faculty layoffs are planned at two colleges, and cuts in staff or salaries at two others. Story on Page 3.

The Dickens Society was just one of many organizations that held "conventions within a convention" at the annual meeting of the Modern Language Association. Story on Page 6.

Postal rates for nonprofit organizations are being raised sharply this week. Story on Page 3.

Philosophers have been strongly criticized for becoming too concerned with "purely technical matters." Story on Page 8.

State governments should take the lead in stimulating scientific research at public universities, according to North Carolina's Gov. James B. Hunt. Story on Page 9.

Scientists with financial interests in companies connected to their research should not receive public support, according to an M.I.T. professor. Story on Page 9.

Private colleges received one-sixth of their income from the U.S. government in fiscal 1980, the Minter-Bowen Study of American Higher Education indicates. Tables and story on Pages 12-13.

Prestigious universities should be able to enhance their reputations despite the hard times ahead, an economist predicts. Story on Page 14.

Financial-aid rules that could have eliminated 840,000 students from the Pell Grant program have been revised. Story on Page 15.

A critical edition of the complete works of Giuseppe Verdi is being published by the University of Chicago Press and Verdi's Italian publisher. Story on Page 19.

Bir Zeit University, on the occupied West Bank of the Jordan River, has been permitted to reopen by Israeli authorities. Story on Page 18.

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Forced Teaching of Creationism Threatens Integrity of Education, Science Group Says

By KIM McDONALD

WASHINGTON

As a federal judge last week struck down an Arkansas creationism law as unconstitutional, scientists meeting here agreed that they must take stronger steps to insure that creationism is not made a mandatory part of public-school curricula.

In a sharply worded resolution, the American Association for the Advancement of Science, the country's largest science organization, denounced last week any "forced teaching of creationist beliefs in public-school science education."

"Creationist groups are imposing beliefs disguised as science upon teachers and students to the detriment and distortion of public education in the United States," the association's board of directors said.

The response preceded a ruling by U.S. District Judge William R. Overton that Arkansas's creationism law violates the constitutional separation of church and state. A similar law awaits a court test in Louisiana.

'We Cannot Relax'

William D. Carey, executive officer of the association, reacted favorably to Judge Overton's decision, but added, "We cannot relax because of a defeat for creationists in one courtroom, nor do we expect the creationists to give up."

According to the A.A.A.S., creationist "science"—which is based on the belief that the earth was created suddenly less than 6,000 years ago—"has no scientific validity" and should not be taught as a science in schools. The vast majority of scientists, who support the theory of evolution, believe scientific evidence shows that life began several million years ago and that the earth is billions of years old.

Reflecting the sentiments of many such scientists, the association said in its resolution that legislation requiring the teaching of creationism was a "real and present threat to the integrity of education and the teaching of science."

Citizens, politicians, and educators, it continued, should oppose any legislation that requires the mandatory instruction in science curricula "of beliefs that are not amenable to the process of scrutiny and testing that is indispensable to science."

Scientists attending the association's an-

Continued on Page 10, Column 2

'Technological Literacy' Urged for Students in the Liberal Arts

By BEVERLY T. WATKINS

KEY BISCAYNE, FLA.

If colleges and universities are to produce graduates who can cope with an increasingly complex society, they must include technology in their liberal-arts curricula, say a small but growing number of educators.

The time is past when a liberal education can be confined to the humanities, the social sciences, and the natural sciences, they say. To understand and contribute to the world they live in, students must learn about modern technology and the reasoning processes that have made its contributions possible, the educators argue.

"An education in the liberal arts must recognize that the domain of human beings is becoming more technological and that our world is much more what we make it than what we have inherited," says Nannerl O. Keohane, president of Wellesley College.

'Whole Human Beings'

"We cannot in good conscience claim to be educating persons today in the liberal arts, preparing them to be strong and critical and whole human beings able to make judgments about things that impinge most crucially on their lives, unless we include the phenomena of technology," Ms. Keohane told a recent meeting of administrators and faculty members from liberal-arts colleges.

To become "technologically literate," she said, students must have more opportunities to learn how to think in quantitative and analytical terms, preferably in liberal-arts courses that integrate practical applications of mathematics into their subject matter.

The conference was arranged by the Alfred P. Sloan Foundation to discuss its plans for a new program to help liberal-arts institutions introduce technological studies and quantitative methods into their cur-

Continued on Page 11, Column 1

Polish Authorities Crack Down on Dissident Students

By SUE MASTERMAN

VIENNA

Military authorities in Poland dissolved the independent student union last week and announced that classes would resume at the country's 104 institutions of higher education no later than the middle of February.

All Polish educational institutions were shut down on December 13 when the government imposed military rule and interned a number of intellectuals and labor and academic leaders. Elementary and secondary schools were reopened January 4.

The independent student union—known as N.Z.S., its initials in Polish—was established last year after a monthlong strike by students at the University of Lodz. The union helped organize nationwide student strikes in November and December in support of a new, more liberal higher-education law.

In the meantime, evidence that university students have begun organized protests against military rule came from an official warning issued by the military authorities and published in *Trybuna Ludu*, the Communist Party newspaper.

The warning said that "student activities as carried out at present contravene the regulations under martial law." It added that students were among "200,000 social parasites" who were refusing to work.

Poland's army newspaper, *Zolnierz Wolnosci*, reported last week that student activists had gone underground. It quoted a leaflet from students at the Warsaw

Continued on page 17, Column 2

> "The plaintiff . . . was recruited to come to the University of Minnesota to be a basketball player and not a scholar. His academic record reflects that he has lived up to those expectations."
>
> *–U.S. District Judge Miles W. Lord; story, Page 5*

CHRONICLE SURVEY

Sources of College and University Revenue in Fiscal 1980

	Private Institutions					*Public Institutions*				
	Change from 1978-79 to 1979-80				Share of total revenue in 1979-80	Change from 1978-79 to 1979-80				Share of total revenue in 1979-80
	Average (a)	Low (b)	Median (c)	High (d)	(e)	Average (a)	Low (b)	Median (c)	High (d)	(e)
Institutions of all types										
Educational and general revenue										
Tuition and fees	+10.6%	+ 8.9%	+11.7%	+15.4%	31.9%	+10.2%	+ 4.3%	+ 9.8%	+16.4%	13.9%
State government	+ 7.4%	0.0%	0.0%	+ 9.9%	1.4%	+10.8%	+ 5.4%	+ 9.9%	+14.2%	46.5%
Federal government	+19.8%	+ 2.3%	+19.9%	+49.8%	16.6%	+12.8%	+ 0.8%	+11.7%	+27.3%	11.3%
Local government	—	—	—	—	—	+11.5%	0.0%	0.0%	+ 9.8%	3.9%
Private gifts and grants	+10.3%	- 6.3%	+ 9.3%	+28.6%	10.2%	+ 8.4%	-11.3%	0.0%	+10.0%	2.1%
Endowment income	+14.9%	+ 1.0%	+16.5%	+32.3%	7.1%	+26.4%	0.0%	0.0%	0.0%	0.3%
Other	+28.2%	+ 3.2%	+22.8%	+45.2%	8.9%	+19.1%	- 9.1%	+15.0%	+38.1%	3.7%
Total educational and general revenue	+14.3%	+ 9.5%	+13.7%	+17.5%	76.1%	+11.3%	+ 7.7%	+10.5%	+14.0%	81.7%
Auxiliary enterprises	+14.7%	+ 6.0%	+10.3%	+15.5%	11.4%	+12.5%	+ 1.1%	+ 9.3%	+14.0%	11.0%
Hospitals and independent operations	+ 3.4%	0.0%	0.0%	0.0%	12.5%	+12.7%	0.0%	0.0%	0.0%	7.4%
Total revenue	+14.4%	+ 8.9%	+13.0%	+16.7%	100.0%	+11.9%	+ 7.7%	+10.3%	+13.9%	100.0%
Research universities										
Educational and general revenue										
Tuition and fees	+ 9.9%	+ 9.4%	+10.6%	+11.1%	20.2%	+ 9.2%	+ 4.7%	+ 8.0%	+13.1%	11.8%
State government	+10.1%	- 7.5%	0.0%	+10.9%	1.4%	+10.0%	+ 7.1%	+ 9.3%	+12.4%	38.8%
Federal government	+17.3%	+12.1%	+17.2%	+21.4%	22.1%	+12.1%	+10.4%	+12.1%	+13.9%	17.9%
Local government	—	—	—	—	—	+20.3%	0.0%	+18.6%	+128.6%	0.4%
Private gifts and grants	+11.3%	+ 3.0%	+ 9.3%	+16.9%	10.8%	+12.4%	+ 5.0%	+12.6%	+23.1%	3.7%
Endowment income	+ 9.3%	+ 3.3%	+17.1%	+25.4%	8.6%	+29.2%	0.0%	+ 8.6%	+26.6%	0.6%
Other	+31.9%	+19.2%	+27.7%	+38.1%	11.1%	+12.7%	- 6.5%	+13.4%	+20.9%	4.7%
Total educational and general revenue	+15.0%	+11.2%	+14.8%	+16.7%	74.4%	+10.8%	+ 8.3%	+10.2%	+11.4%	78.0%
Auxiliary enterprises	+18.5%	+10.5%	+13.0%	+19.3%	7.3%	+21.0%	+ 9.3%	+10.7%	+19.8%	8.8%
Hospitals and independent operations	+17.3%	0.0%	0.0%	+16.8%	18.4%	+21.4%	0.0%	+ 7.3%	+21.3%	13.2%
Total revenue	+15.6%	+11.4%	+14.5%	+17.5%	100.0%	+12.9%	+ 8.7%	+10.9%	+13.2%	100.0%
Other Ph.D.-granting universities										
Educational and general revenue										
Tuition and fees	+11.4%	+ 9.8%	+11.8%	+13.8%	44.8%	+15.8%	+ 9.9%	+15.7%	+21.5%	15.5%
State government	+ 3.3%	0.0%	0.0%	+ 4.8%	1.3%	+ 9.3%	+ 8.7%	+ 9.9%	+10.8%	42.6%
Federal government	+23.7%	+19.9%	+32.0%	+56.7%	10.9%	+13.0%	+ 2.6%	+ 5.5%	+22.4%	7.3%
Local government	—	—	—	—	—	+11.5%	0.0%	0.0%	+15.3%	0.2%
Private gifts and grants	+ 7.5%	+ 1.7%	+ 9.8%	+36.6%	7.5%	+15.7%	+ 4.4%	+17.6%	+28.7%	2.0%
Endowment income	+25.7%	+15.4%	+27.6%	+59.4%	3.7%	+24.2%	0.0%	0.0%	+64.5%	0.1%
Other	+19.3%	+ 3.2%	+18.0%	+26.8%	8.0%	+26.6%	+27.7%	+41.7%	+48.4%	3.5%
Total educational and general revenue	+13.8%	+12.1%	+15.3%	+17.0%	76.3%	+12.0%	+11.1%	+12.6%	+13.8%	71.2%
Auxiliary enterprises	+ 7.0%	+ 5.3%	+ 7.7%	+14.3%	13.9%	+ 7.8%	+ 5.9%	+ 8.1%	+10.9%	14.4%
Hospitals and independent operations	+21.3%	0.0%	0.0%	0.0%	9.9%	+14.0%	0.0%	0.0%	0.0%	14.4%
Total revenue	+13.5%	+10.5%	+12.8%	+16.7%	100.0%	+11.7%	+ 8.0%	+11.9%	+13.6%	100.0%
Comprehensive colleges and universities										
Educational and general revenue										
Tuition and fees	+11.6%	+10.5%	+12.3%	+14.1%	57.3%	+11.4%	+ 5.6%	+ 9.9%	+14.0%	15.7%
State government	+ 2.2%	- 8.2%	0.0%	+ 9.6%	1.2%	+11.1%	+ 6.5%	+ 9.6%	+14.2%	56.1%
Federal government	+16.1%	+ 2.9%	+13.9%	+28.9%	8.3%	+ 8.9%	- 5.4%	+11.2%	+28.8%	6.0%
Local government	—	—	—	—	—	- 0.3%	0.0%	0.0%	0.0%	1.2%
Private gifts and grants	+10.2%	- 8.0%	+ 6.0%	+28.3%	6.6%	+ 7.4%	- 9.0%	0.0%	+11.8%	1.0%
Endowment income	+21.3%	+ 9.2%	+20.0%	+31.5%	4.0%	+44.0%	0.0%	0.0%	+ 8.3%	0.1%
Other	+28.8%	+ 8.2%	+26.8%	+40.6%	4.0%	+24.6%	-15.6%	0.0%	+32.1%	2.6%
Total educational and general revenue	+12.9%	+10.3%	+12.7%	+16.6%	81.4%	+11.2%	+ 6.4%	+ 9.7%	+14.0%	82.7%
Auxiliary enterprises	+13.1%	+ 8.1%	+12.6%	+15.7%	18.5%	+ 7.4%	+ 2.7%	+ 8.0%	+12.8%	16.7%
Hospitals and independent operations	+ 4.0%	0.0%	0.0%	0.0%	0.1%	+ 9.0%	0.0%	0.0%	0.0%	0.6%
Total revenue	+12.9%	+ 9.7%	+13.0%	+15.8%	100.0%	+10.5%	+ 7.1%	+ 9.2%	+12.7%	100.0%
2-year colleges										
Educational and general revenue										
Tuition and fees	+12.7%	+ 6.9%	+13.6%	+23.8%	46.4%	+ 6.4%	+ 2.1%	+ 8.5%	+16.8%	14.4%
State government	+ 1.7%	0.0%	0.0%	+ 7.0%	1.7%	+13.1%	+ 3.3%	+10.3%	+16.5%	51.6%
Federal government	- 8.9%	-13.9%	+ 7.8%	+44.1%	4.9%	+19.0%	1.0%	+17.1%	+46.5%	8.3%
Local government	—	—	—	—	—	+ 9.9%	0.0%	0.0%	+ 7.2%	16.6%
Private gifts and grants	+ 9.1%	0.0%	+13.6%	+31.6%	20.1%	2.9%	-28.4%	0.0%	0.0%	0.6%
Endowment income	+27.5%	0.0%	0.0%	+26.9%	2.5%	0.0%	0.0%	0.0%	0.0%	0.0%
Other	+23.5%	-12.3%	+13.7%	+60.8%	6.3%	+18.7%	- 5.2%	+15.1%	+44.4%	3.3%
Total educational and general revenue	+10.9%	+ 5.3%	+13.6%	+27.9%	81.8%	+12.0%	+ 6.9%	+11.3%	+16.7%	94.8%
Auxiliary enterprises	+10.9%	+ 0.7%	+ 8.9%	+18.9%	18.2%	+ 6.5%	0.0%	+ 9.3%	+14.6%	5.1%
Hospitals and independent operations	-100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Total revenue	+10.4%	+ 4.4%	+12.5%	+24.5%	100.0%	+11.8%	+ 7.1%	+11.5%	+16.6%	100.0%
Selective liberal-arts colleges										
Educational and general revenue										
Tuition and fees	+10.8%	+ 8.2%	+ 9.7%	+12.5%	50.0%					
State government	+ 1.9%	0.0%	0.0%	+ 8.6%	1.2%					
Federal government	+47.0%	+20.5%	+50.1%	+91.3%	3.6%					
Local government	—	—	—	—	—					
Private gifts and grants	+20.2%	+ 3.7%	+23.6%	+44.8%	9.6%					
Endowment income	+16.1%	+ 6.6%	+15.1%	+24.1%	11.1%					
Other	+33.9%	+14.6%	+36.6%	+63.8%	4.5%					
Total educational and general revenue	+14.8%	+10.6%	+14.8%	+17.6%	80.0%					
Auxiliary enterprises	+ 8.1%	+ 5.5%	+ 8.0%	+10.6%	19.8%					
Hospitals and independent operations	- 2.8%	0.0%	0.0%	0.0%	0.3%					
Total revenue	+13.4%	+10.7%	+13.1%	+16.6%	100.0%					
Less selective liberal-arts colleges										
Educational and general revenue										
Tuition and fees	+12.9%	+ 6.4%	+13.1%	+18.7%	48.2%					
State government	+ 6.6%	0.0%	0.0%	+14.7%	1.4%					
Federal government	+19.9%	2.9%	+17.7%	+52.8%	9.8%					
Local government	—	—	—	—	—					
Private gifts and grants	+ 0.8%	-12.7%	+ 1.8%	+23.0%	11.8%					
Endowment income	+22.6%	0.0%	+14.0%	+47.0%	3.8%					
Other	+15.6%	-12.6%	+12.9%	+55.6%	3.3%					
Total educational and general revenue	+12.1%	+ 6.1%	+13.0%	+16.4%	78.3%					
Auxiliary enterprises	+10.3%	+ 5.5%	+10.6%	+17.9%	21.7%					
Hospitals and independent operations	-97.7%	0.0%	0.0%	0.0%	0.0%					
Total revenue	+10.8%	+ 6.5%	+12.8%	+15.6%	100.0%					

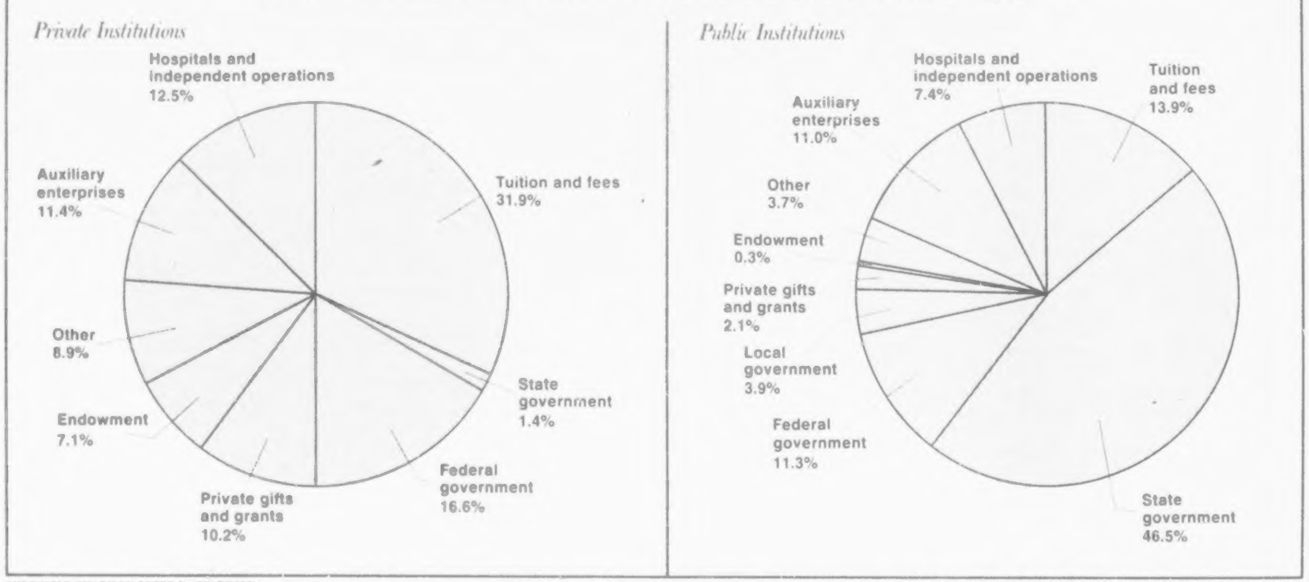
(a) Mean increase or decrease, 1979-80 compared with 1978-79
(b) One-fourth of the institutions reported increases smaller than this
(c) One-half of the institutions reported increases larger than this
(d) One-fourth of the institutions reported increases larger than this
(e) Percentage distribution of 1979-80 revenue

Note: Survey data are based on information from 133 private institutions and 100 public institutions in a stratified random sample and are part of a continuing series of studies by W. John Minter and Howard R. Bowen. Research for the public institutions' financial data for 1979-80 was underwritten in part by the American Association of State Colleges and Universities, the American Association of Community and Junior Colleges, and the National Association of State Universities and Land-Grant Colleges. A technical report on survey design and sampling statistics will be available later from John Minter Associates. Specific questions may be addressed to John Minter Associates, P.O. Box 107, Boulder, Colo. 80306.

SOURCE: MINTER-BOWEN STUDY OF AMERICAN HIGHER EDUCATION

U.S. Provided a Sixth of Private Institutions' Income in Fiscal 1980

WHERE HIGHER-EDUCATION FUNDS CAME FROM IN 1979-80



CHRONICLE CHART BY PETER H. STAFFORD

SOURCE: MINTER-BOWEN STUDY OF AMERICAN HIGHER EDUCATION

Private colleges and universities received a sixth of their income from the federal government in fiscal 1980, a survey of higher-education finances shows—an increase of nearly 20 per cent over the previous year's figure.

The survey data illustrate the extent to which the private institutions have become dependent on federal funds. A similar survey covering fiscal 1974 showed private institutions had received less than a twelfth of their income from the government.

Since the survey covers the year that ended in June, 1980, it reflects none of the Reagan Administration's changes in student aid and other federal aid programs.

For public colleges and universities, the survey shows, federal funds increased at a slower rate and represented a smaller portion of total budgets than for the private institutions.

Federal funds reported by the public institutions for fiscal 1980 were up by 12.8 per cent over the previous year and accounted for 11.3 per cent of their revenue.

Average total revenue for current operations in fiscal 1980 increased by 14.4 per cent at private institutions and by 11.9 per cent at public institutions, the survey shows.

Income from tuition and student fees increased by more than 10 per cent at both public and private institutions. Tuition and fees provided 32 per cent of the income for private institutions in fiscal 1980, compared with the 68 per cent reported in the 1974 survey. In fiscal 1980, 13.9 per cent of the public institutions' income came from tuition and fees.

Compared with fiscal 1979, revenue from private gifts and grants in 1980 was up 10.3 per cent at private institutions and 8.4 per cent at public institutions. At public institutions, gifts and grants from private sources accounted for 3.4 per cent of total revenue, compared with 10.2 per cent at private institutions.

Endowment income, which provides private institutions with 7.1 per cent of their total revenue, increased nearly 15 per cent in fiscal 1980. For public institutions, endowment income was up by a much larger 26.4 per cent, but still acounted for less than 1 per cent of total revenue.

State funds, which accounted for 46.5 per cent of the revenue of the public institutions in fiscal 1980, increased, on the average, by 10.8 per cent over fiscal 1979. Private institutions reported an increase of 7.4 per cent in state funds, but only 1.4 per cent of their revenue came from state governments.

The survey found that total revenue at the top fourth of the private colleges and universities had increased by 16.7 per cent or more. Among public institutions, revenue for the top fourth rose 13.9 per cent or more.

The survey of college and university revenue is part of a financial study by W. John Minter, head of an educational research company in Boulder, Colo., and Howard R. Bowen, professor of economics and education at the Claremont Graduate School.

The Minter-Bowen study's findings on expenditures and other financial and educational trends in higher education will be reported in future issues of *The Chronicle*.

The study continues a series on the condition of private higher education Mr. Minter and Mr. Bowen began in 1976 under the auspices of the Association of American Colleges. It was sponsored from 1978 through 1980 by the National Institute of Independent Colleges and Universities.

In 1980, they conducted a similar study of public higher education, sponsored by the American Association of Community and Junior Colleges, the American Association of State Colleges and Universities, and the National Association of State Universities and Land-Grant Colleges.

Research for the Minter-Bowen study's data on public institutions for fiscal 1980 was underwritten in part by those three associations.

—JACK MAGARRELL

Faculty and Staff Advisors

TAKE A W.A.L.K. (the Whole Advising for Life Key)
(An Advising System that connects Academic, Vocational, and Personal Needs)

Advisors Tell Us

- Advising is not a priority on most campuses There are few rewards given for effective advising.
- Most advisors have received little or no preparation for the advising task.
- Many advising systems fail because they do not put pressure on student support systems, i.e., student affairs, career development, placement, etc.
- Most advising systems put more emphasis on helping students with their schedules and seldom connect academic plans with personal skills and interests and vocational options.
- Most advising systems imply more work for the advisors and less work for the student.

THE W.A.L.K. SYSTEM

In the 1950's we emphasized academic advising; in the 1960's we stressed personal advising; and in the 1970's—career advising. The 1980's present an opportunity to connect these related concerns into a total life advising approach.

ACADEMIC
(World of Knowledge)

Problem: Most colleges do not effectively advise students about the value of the basic liberal life skills, i.e.,
- ability to communicate in writing
- ability to communicate orally
- ability to analyze and synthesize
- ability to examine one's attitudes and values
- ability to relate to other people

WALK STEPS: The WALK includes strategies that help students identify liberal life skills that are necessary in the world of knowledge, the world of work and the world of lifestyle/values. The WALK also provides a systematic approach to assisting students struggling with the "How Do I Select a Major" question.

VOCATIONAL
(World of Work)

Problem: Most people are occupationally illiterate. The results from the Occupational Literacy Exam show that most people cannot identify four occupations by title that they feel might match their skills and interests.

WALK STEPS: The WALK includes strategies that help students identify 15-20 vocations by title that match their skills and interests. The WALK also outlines strategies that will encourage students to obtain professional experience through what the Chinese call their "to be in touch" program.

PERSONAL
(World of Lifestyle-Values)

Problem: Carnegie Senior Fellow, Arthur Levine, suggests that today's students are more interested in individual priorities and less interested in community priorities. Alexander Astin suggests that the student who is involved in community academic, vocational and extracurricular activities is a student that is more likely to persist.

WALK STEPS: The Personality Lifestyle helps the advisor identify previous student involvement and future student interests.

The WALK helps the advisor chart ACADEMIC, VOCATIONAL and PERSONAL development. All these developments are recorded in the Students Life File. This file is particularly useful to a student when he/she prepares for job or graduate school placement.

WALK LEADERSHIP

"The Life Advising System in this country is a disaster."
Watkins
Weekender, January, 1980

"Most people are occupationally illiterate."
Watkins
Los Angeles Times, December 1979

The author of the WALK is National Institute for Career Development director, Ed Watkins. Watkins spends a third of his time working with faculty and staff who seek to improve either their own individual advising skills and/or their campus advising system.

ON-CAMPUS WORKSHOPS

Ed Watkins conducts half-day advising workshops for faculty and staff.

EAST COAST TRIP: March 15-March 26. Contact Jan Lewien at the Institute about open dates and obtain list of schools that have hosted 1981 workshops.

REGIONAL WORKSHOPS

Minneapolis, Minnesota
February 2-3, 1982

Denver, Colorado
February 22-23, 1982

New York City, New York
March 21-22, 1982

Doane College, Crete, Nebraska
April 12-13, 1982

WALK MATERIALS

Occupational Literacy Exam—motivational instrument that helps advisors encourage people to begin the life discovery process. The test has been taken by over 100,000 people.

1,000 Jobs for the Liberal Arts Student—this new instrument helps the participant identify many occupational options that fit their skills and interests.

Preparing Liberal Arts Students for Careers (Jossey-Bass). A book edited and co-authored by Institute director, Ed Watkins which explains Career Development process.

For material prices, please contact the National Institute.

FOR FURTHER INFORMATION CONTACT: Jan Lewien, Assistant to the Director, National Institute for Career Development, Doane College, Crete, Nebraska 68333. (402) 826-2201

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E CHRONICLE
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News Summary

Articles on inside pages

The State Department has tried to reassure universities that it plans no increase in its regulation of university activities. Story on Page 7.

Voluntary controls on scholarly publications, proposed by a top C.I.A. official, have provoked sharp criticism from scientists. Story on Page 7.

Television broadcasts of college football games will remain in the firm control of the National Collegiate Athletic Association. Story on Page 4.

Stiff new penalties to end cheating in college sports have been approved by the N.C.A.A. Story on Page 4.

Members of the Association of Intercollegiate Athletics for Women have taken steps to prepare for the group's disbanding. Story on Page 5.

The Supreme Court has sidestepped a ruling on the right of private universities to restrict activities by outside groups. Story on Page 13.

The Court also ruled that a campus policeman who did not have a search warrant had the right to arrest a student in a dormitory. Story on Page 13.

Operating expenses rose 13 per cent at private colleges and 11 per cent at public colleges in fiscal 1980. Story and table on Pages 10-11.

Foul weather has disrupted activities this month on campuses in many states. Stories on Page 12.

"Cultural power" will be a chief focus of *Raritan*, a new intellectual journal. Story on Page 23.

Soviet scientists are upset by a decline in interest in science among Russian youth. Story on Page 19.

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Reagan Seeks Law to Bar Tax Exemptions for Institutions that Practice Discrimination

President acts after heavy criticism of change by the IRS in an 11-year-old policy

By **CHERYL M. FIELDS**

WASHINGTON

- **Texts** of the Justice Department memorandum and President Reagan's statement appear on Page 16.
- **A sampling** of newspaper editorial reaction to the Justice Department decision appears on Page 17.
- **Bob Jones University** is proud of being different. Story on Page 16.

President Reagan said last week that he would ask Congress to bar tax exemptions for educational institutions and other organizations that practice racial discrimination.

His announcement followed a storm of criticism that erupted after the Internal Revenue Service announced that it would no longer deny tax-exempt status to educational institutions that discriminate against blacks, as the agency had done since 1970.

The Justice Department had also asked the Supreme Court to drop two cases it had previously agreed to hear challenging previous I.R.S. decisions to deny tax exemptions to Bob Jones University and Goldsboro Christian Schools in Goldsboro, N.C.—saying the new I.R.S. policy made the cases moot.

The Internal Revenue Service and the Justice Department—which had asked the Supreme Court last fall to uphold the denial of tax exemptions to the institutions—defended the shift in policy by saying that the Reagan Administration deplored racial discrimination but did not believe tax laws gave the I.R.S. the authority to deny institutions tax-exempt status.

The agencies said Congress could pass legislation specifically giving the I.R.S. that authority if it believed it should have it.

The President underscored that argument in announcing he would propose legislation to Congress, saying that while he was "unalterably opposed to racial discrimination in any form. . . . I am also opposed to administrative agencies exercising powers that the Constitution assigns to the Congress.

"Such agencies, no matter how well intentioned, cannot be allowed to govern by administrative fiat. That was the sole basis of the decision announced by the Treasury

Continued on Page 16, Column 1

Poland's Military Government Suspends All University Reforms Won Last Winter

By **SUE MASTERMAN**

VIENNA

- **In New York:** Three American foundations will aid Polish scholars stranded in the West. Story on Page 21.
- **In Paris:** Four leaders of Poland's student union say they will continue the group's work in exile. Story on Page 21.

Poland's military government last week suspended all of the reforms won by university students after widespread strikes last winter at the country's institutions of higher education.

Under new regulations issued by the Ministry of Higher Education, Poland's 104 colleges and universities will face strict controls designed to prevent any political activity by students and faculty members.

A ministry spokesman has indicated that the universities will reopen in mid-February.

All educational institutions were closed December 13 when the government imposed military rule in Poland. Elementary and secondary schools reopened January 4, and some graduate programs have resumed.

However, the government has delayed the reopening of the universities, apparently until it feels sure it can prevent further outbreaks of student unrest.

Earlier this month, the military rulers announced that one of the chief sources of that unrest—N.Z.S., the independent student union known by its Polish initials—had been dissolved.

The regulations, which set conditions that must be met in order for the universities to reopen, are an indication that the brief period of democratization of higher education after last winter's protests has come to an end.

Specifically, the Ministry of Higher Education suspended reforms that granted universities the right to set their own curricula, and provided for student and faculty representation on university senates.

It also said students would once again be required to take compulsory courses in Russian and in Communist ideology. The

Continued on Page 21, Column 1

Students Rush to Beat Cutoff of Social Security Aid

By **JANET HOOK**

With thousands of students facing a May 1 deadline for enrolling in college or losing their eligibility for Social Security education benefits, some high-school seniors are trying to get an early start on their college careers this spring.

Although such moves to beat the May 1 cutoff of benefits—and special efforts by colleges and universities to accommodate such students—have been seen only in scattered regions thus far, the numbers are expected to grow as more high-school seniors and their families learn of the impending elimination of a $2.3-billion program by the Social Security Administration.

In its budget-cutting campaign last sum-

Continued on Page 14, Column 4

How Benefits Will Be Affected

Under new federal guidelines, college students may continue to receive Social Security benefits only if they:

▶ Are enrolled full time in an institution of higher education before May, 1982.

▶ Were on the Social Security rolls—either as a high-school or college student—before September, 1981. Children who became eligible for benefits after that date, even if they are now enrolled in college, will receive payments only until July, 1982.

Eligible students can continue to draw benefits until April, 1985, or their twenty-second birthday—whichever comes first—as long as they are unmarried and enrolled full time.

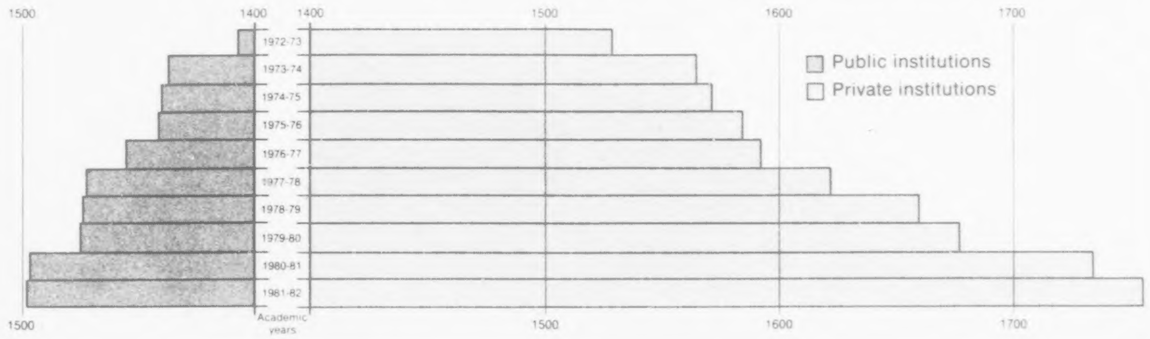
However, those benefits will be subject to the following reductions:

▶ Students will receive 25 per cent less in the academic year beginning September, 1982, 50 per cent less as of September, 1983, and 75 per cent less as of September, 1984. All payments will be eliminated after April, 1985.

▶ Annual cost-of-living increases will be eliminated.

▶ Benefits will no longer be paid for the months of May, June, July, and August.

THE GROWING NUMBER OF COLLEGES



	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82
Public institutions										
4-year	536	544	544	545	550	552	550	549	552	558
2-year	871	893	897	897	905	921	924	926	945	940
All	1,407	1,437	1,441	1,442	1,455	1,473	1,474	1,475	1,497	1,498
Private institutions										
4-year	1,286	1,311	1,327	1,353	1,363	1,386	1,391	1,405	1,405	1,420
2-year	243	254	244	231	229	236	269	272	329	335
All	1,529	1,565	1,571	1,584	1,592	1,622	1,660	1,677	1,734	1,755
Public and private combined										
4-year	1,822	1,855	1,871	1,898	1,913	1,938	1,941	1,954	1,957	1,978
2-year	1,114	1,147	1,141	1,128	1,134	1,157	1,193	1,198	1,274	1,275
Total	2,936	3,002	3,012	3,026	3,047	3,095	3,134	3,152	3,231	3,253

CHRONICLE CHART BY PETER H. STAFFORD

SOURCE: NATIONAL CENTER FOR EDUCATION STATISTICS

U.S. Says Number of Private Colleges Is Increasing

By **JACK MAGARRELL**

WASHINGTON

The federal government's official list of American colleges and universities shows that private higher education is expanding, with more institutions every year. But not everyone believes that.

The National Institute of Independent Colleges and Universities, which surveys private institutions every two years for a report on openings and closings, contends that the total number of private colleges and universities has been declining.

The government's National Center for Education Statistics and the private colleges' institute recognize that they are not counting institutions on the same basis. The institute counts only nonprofit institutions; N.C.E.S. includes some proprietary institutions.

The newly published 1981-82 edition of N.C.E.S.'s *Education Directory* reports a total of 3,253 recognized institutions of higher education in the 50 states and District of Columbia in the current academic year. That is 22 more than N.C.E.S. reported a year ago and 317 more than it reported in 1972-73.

Private colleges and universities account for 21 of the 22 additional institutions reported this year, and 226 of the 317 institutions added since 1972-73.

To be counted and listed in the N.C.E.S. directory, an institution must meet one of three criteria:

▶ Be accredited at the college level by an agency recognized by the Secretary of Education.

▶ Have "preaccredited status" (progressing toward accreditation) at the college level with a nationally recognized accrediting agency.

▶ Be a public or nonprofit institution whose credits are accepted by at least three accredited college-level institutions.

The rules for being included in the *Education Directory* have been changed at least twice in the past 10 years in ways that increased the number of profit-making institutions listed:

▶ In 1978-79 the list was opened to institutions offering one-year programs at the college level. Previously, programs that were shorter than two years did not qualify.

▶ In 1980-81 the list of agencies whose accreditation would qualify an institution for inclusion in the directory was expanded to include the National Association of Trade and Technical Schools, which accredits occupational, trade, and technical programs.

The 1,755 private institutions reported by the N.C.E.S. this year include 148 two-year institutions and 20 four-year institutions that are profit-making organizations. Comparable figures for previous years are not available.

Officials at the N.C.E.S. said future statistical reports would attempt to distinguish more clearly between nonprofit and profit-making private institutions.

Virginia Hodgkinson, executive director of the independent colleges' institute, said her organization had been complaining for several years that the N.C.E.S. was mixing for-profit and nonprofit private institutions in its statistics. The result, she said, was that N.C.E.S. showed an increasing number of private institutions while the institute reported a decline in the number of nonprofit colleges and universities.

The institute's most recent survey of nonprofit institutions, for 1979-80, showed that 76 private colleges or universities had opened during the previous 10 years while 129 had closed. Results of the organization's next survey of openings and closings are to be published next fall.

The number of public colleges and universities reported by N.C.E.S. has been more stable and less disputed than the number of private institutions.

Compared with last year's directory, this year's edition lists six more public four-year institutions and five fewer public two-year institutions. Since 1972-73, according to the N.C.E.S. count, the number of public four-year institutions has increased by 22 and the number of public two-year institutions has increased by 69.

The N.C.E.S. says the 1981-82 *Education Directory* lists among the private institutions 168 profit-making organizations, 814 independent nonprofit institutions, and 773 institutions affiliated with religious groups.

The religious affiliations listed were: Protestant—454 four-year and 52 two-year; Roman Catholic—207 four-year and 21 two-year; Jewish—24 four-year and no two-year; others—13 four-year and 2 two-year.

---

til he was 68, he would earn a total of $1.2-million. Judge Sacco lowered that figure to $800,000 and ordered the $120,000 payment to Marianne Reen of Springfield.

The couple separated after 10 years of marriage when Dr. Reen graduated from Northwestern University in 1978. Ms. Reen's lawyer testified that she had agreed to work while her husband completed work on his undergraduate degree and went to dental school.

▪ 2 Judges Withdraw from New Hampshire Case

New Hampshire's two federal district judges have disqualified themselves from hearing a case brought against the University of New Hampshire by the Collegiate Association for the Research of Principles, which university officials say is an arm of Sun Myung Moon's Unification Church, and which is seeking status as a student organization. The university denied recognition to the association in October.

Court officials said that either the case would have to be tried in a neighboring jurisdiction or a federal judge from another district would have to come to New Hampshire to preside.

Judge Martin F. Loughlin granted the organization's request for a mistrial after its lawyers argued that he had made remarks during earlier hearings indicating that he was prejudiced on the matter.

Judge Shane Devine disqualified himself because he is a former partner in the law firm that represents the university.

▪ Medical-School Enrollment Totaled 65,497 in 1980-81

The number of medical students in the U.S. rose to 65,497 in 1980-81, up from 64,195 the previous year, according to the *Journal of the American Medical Association*.

The number of full-time medical-school faculty members also rose, from 48,892 to 50,536, making the ratio of instructors to students 1.3 to 1.

The *Journal* also reported a total of 17,146 first-year medical students in 1980-81; of those, 4,970 were women and 2,290 were members of minority groups. About 27 per cent of all medical-school students are women, and about 13 per cent are minority-group members.

▪ Correction

The first item listed in "In Federal Agencies" in the January 6 issue of *The Chronicle* should have said, "The Department of Education has published a list of accrediting and state-approved agencies that it is reviewing to determine whether they should continue to be listed as reliable authorities on the quality of education."

Notes on . . .
The Student Press

Reporters for the student daily at Northern Illinois University became embroiled recently in a journalistic-ethics controversy that led observers—both on the De Kalb campus and in the Chicago media—to ask how much license the First Amendment's guarantee of freedom of the press gives a student newspaper to violate campus regulations.

The question arose after the *Northern Star* published an article about the university's health center. The paper said it had undertaken the article after several students complained that they had been given prescriptions on the basis of medical examinations that were cursory at best.

To test the complaints, four of the paper's reporters went to the health center at different times, complaining of anxiety, sleeplessness, menstrual cramps, and other ailments. The students did not identify themselves as reporters. After examinations that they described as brief, the reporters were prescribed small doses of Valium and other drugs. They did not have the prescriptions filled.

(According to a university spokesman, health-center physicians routinely prescribe such medication—in amounts only large enough to tide the student over until he can seek counseling or regular medical attention—without thorough examinations.)

After the article appeared, the university's vice-president for student affairs brought charges against the reporters and their supervisor under the university's judicial code, which forbids students to misrepresent themselves to university officials. The *Star* itself carried a number of letters about the article, some praising the paper's initiative and others maintaining that its tactics were unethical.

The story soon reached the Chicago papers, which defended the *Star*'s investigation in columns and editorials, the spokesman said. The *Star*'s champions—who were joined by some members of the American Civil Liberties Union—suggested that the university was violating the First Amendment by bringing charges.

The university's position, however, was that the four were students first and reporters second, and could reasonably be expected to abide by the strictures of the judicial code.

The university's president, William R. Monat, eventually ordered the charges dropped on the advice of the university's lawyers, the spokesman said. Mr. Monat has also set up a committee to study the health center's prescription procedures.

▪

When the health service at the University of Wisconsin at Stevens Point needed something to call attention to a poster advertising its birth-control counseling, it chose a character from the comic strip "Peanuts." The character was Lucy, and she was pregnant.

Staff members of the university's student weekly, the *Pointer*, viewed the poster as sexist, because it failed to show that men and women are equally responsible for pregnancies. So the paper ran a parody of the poster, which showed Charlie Brown and Lucy in what could delicately be called a compromising position.

It was too much for the United Feature Syndicate, which distributes "Peanuts." Claiming that the *Pointer* had infringed upon its copyright, the syndicate filed suit in federal court against *everybody*—the university regents, the head of the health service, the paper's editor, its faculty adviser—even the local press that prints it. The suit asks damages of $250,000.

—LAWRENCE BIEMILLER

JOHN FORASTE

Brown U.'s Howard R. Swearer

NCAA Rejects Efforts by Football Group

By LORENZO MIDDLETON

HOUSTON

The National Collegiate Athletic Association last week established firm control over all means of televising college football games.

Members attending the association's annual convention here overwhelmingly rejected efforts by the College Football Association to put the control of contracts for televised football games in the hands of individual institutions. The C.F.A. is a group of 61 N.C.A.A. member institutions that have major football programs.

Proposals by C.F.A. members that would have taken control of television "property rights" away from the N.C.A.A. were soundly defeated by the 632 athletic directors, college presidents, and faculty representatives at the convention. They also approved a change in the N.C.A.A. constitution that spells out for the first time that the "telecasting, cablecasting, or otherwise televising of intercollegiate football games of member institutions shall be controlled by bylaws enacted by the association."

A final settlement of the issue is not expected until courts rule on two pending lawsuits filed against the N.C.A.A. by C.F.A. institutions.

Leaders of the N.C.A.A. assert that the organization has had control over television rights since 1956. But its authority was challenged last summer, when the C.F.A. decided to negotiate its own contract with NBC-TV. That contract would have conflicted with the N.C.A.A.'s pacts with ABC and CBS. The C.F.A. members pulled out of the agreement with NBC after the N.C.A.A. ruled that institutions signing the maverick contract would be severely penalized.

The conflict began over network television contracts, but by last week it had broadened to include contracts with cable and other forms of pay television.

John O. Bolvin, faculty representative from the University of Pittsburgh, argued that the institutions should be allowed to control cable and subscription-television packages because those media were "still in the formative stages." Individual institutions or conferences "should be allowed to experiment with different means of using this new technology," he said.

But Wiles Hallock, executive director of the Pacific 10 Conference and chairman of the N.C.A.A. football-television committee, argued that "decontrol of any form of television is really tantamount to decontrol totally of live television."

Walter Byers, the N.C.A.A.'s executive director, added that if the association were to lose its grip on television, it would leave control in the hands of the television networks, creating "a limited TV aristocracy." He called for a halt to the C.F.A.'s legal action against the athletic association.

However, representatives of the University of Texas, which has filed a lawsuit against the N.C.A.A. in state court in Texas, and the Universities of Georgia and Oklahoma, which have filed a similar suit in U.S. district court in Oklahoma City, said their institutions had no plans to drop the litigation. The lawsuits challenge the N.C.A.A.'s control of their television "property rights."

The University of Texas made an unsuccessful attempt to delay the decision on the television matter until after the courts had decided the issue.

On the first day of the convention, the leaders of the N.C.A.A. were served with a temporary restraining order, obtained by the university, di-

Association Votes Itself New Powers to Penalize Institutions

The 15 Institutions Now on NCAA Probation

	Probation expires	Sport	Sanctions in effect	Grounds for probation
Arizona State University	12/30/82	Football	No televised games in 1982, one booster barred from recruiting	Improper recruiting, extra benefits to athletes
Arkansas State University	10/15/83	Basketball	No postseason competition in 1982	Improper recruiting
University of California at Los Angeles	12/4/83	Basketball	No postseason competition in 1982, two boosters barred from recruiting	Improper recruiting
University of California at Santa Barbara	12/1/82	Basketball	No postseason competition in 1982	Improper recruiting, extra benefits to athletes
California State Polytechnic U. at Pomona	1/17/83	Basketball	No postseason competition in 1982	Unearned grades
University of Colorado	12/8/82	Football	None	Improper recruiting
Southern Methodist University	6/9/83	Football	None	Improper recruiting
University of Miami	11/2/83	Football	No postseason competition in 1982, 10 athletic scholarships cut in 1982-83	Improper recruiting
University of New Haven	6/1/82	Basketball	No postseason competition in 1982	5-year rule, out-of-season practice, tryouts
University of New Mexico	11/28/83	Basketball	No postseason competition in 1982	Fraudulent transcripts, extra benefits to athletes
University of Oregon	12/22/83	Football	No postseason competition and no televised games in 1982, five athletic scholarships cut in 1982-83, three athletic scholarships cut in 1983-84, one basketball scholarship cut in 1983	Unearned grades, extra benefits to athletes
Texas Christian University	10/28/82	Basketball	One assistant coach barred from recruiting in 1982-83	Unearned grades, extra benefits to athletes, unethical conduct
West Texas State University	6/1/82	Basketball	None	Improper recruiting, extra benefits to athletes
Wichita State University	12/18/84	Basketball	No postseason competition in 1982 or 1983, one athletic scholarship cut in 1982-83 and 1983-84	Extra benefits to athletes, recruiting inducements
University of Wisconsin at Madison	12/18/82	Football	None	Improper recruiting

SOURCE: NATIONAL COLLEGIATE ATHLETIC ASSOCIATION

HOUSTON

In a stepped-up effort to discourage cheating by college athletic officials, the National Collegiate Athletic Association last week gave itself the power to impose stiff new penalties against offending institutions.

Under one new procedure, the association's infraction committee now has authority to prohibit live television coverage of a team whose TV contracts are not controlled by the association.

In the past, prohibitions against television coverage have been limited to football, the only sport for which in-season television contracts are controlled by the N.C.A.A. Penalties against basketball and other nonfootball programs were largely limited to restrictions against postseason competition.

Now those teams could be banned from lucrative live-television appearances during the regular season. However, some critics of the measure have pointed out that institutions might circumvent such penalties by delaying the transmission of their games by two minutes or more, in which case the telecasts technically would be "delayed" rather than "live."

Under another new rule, athletes would be allowed to transfer freely from institutions that have been prohibited from playing in postseason games.

With the approval of the N.C.A.A. Council, an athlete would be allowed to enroll in another institution without losing a year of playing eligibility, as would other athletes under normal transfer circumstances.

This rule was designed to answer a longstanding criticism, said John W. Sawyer, a faculty representative from Wake Forest University, "that many innocent athletes are penalized excessively" when their institutions are banned from postseason games for infractions that do not involve them personally.

Several N.C.A.A. officials predicted that the new transfer rule would prove to be one of the association's strongest deterrents to illegal recruiting actions and other rules violations.

In another measure, designed to discourage cheating, the association adopted a recommendation to encourage institutions to dismiss coaches found to be involved in N.C.A.A.-rule violations.

The members of the association rejected a proposal that would have allowed the N.C.A.A. to impose up to $50,000 in fines on institutions violating its rules.

Over the past two years, the association's enforcement officers have relied on athletes to turn over information about illegal practices of their recruiters and coaches.

The athletes have been reached mainly through two programs, "Operation Big Brother" and "Operation Intercept."

Under Operation Intercept, N.C.A.A. investigators visit the top 100 high-school football and basketball players each year, lecturing them on proper recruiting procedures and asking them for information about college representatives who might be violating those procedures.

Under the Big Brother program, each of the eight investigators "adopts" four of the most sought-after players (two in football and two in basketball), visiting them frequently to keep abreast of who is recruiting them and how.

Obtaining information directly from the athletes shortens the interval between the commission of an infraction is committed and the time it is reported, said S. David Berst, the association's director of enforcement. He said athletes had helped the association build strong cases against institutions that were violating the rules.

Information from two former basketball players at Wichita State University led the association to put that university on probation for three years, Mr. Berst announced last week. The violations in the men's basketball program occurred between 1975 and 1980.

Under the sanctions announced by the N.C.A.A. last week, the men's basketball team at Wichita State was prohibited from participating in postseason games in 1982 and 1983 and ordered to give up two scholarship positions.

"Numerous violations related to the receipt of commercial airline transportation, cash, clothing, and use of an automobile by former student athletes, as well as promises to make such benefits available to recruits, were found in this case," said Charles Alan Wright, chairman of the N.C.A.A. infractions committee.

Mr. Wright added that "large sums of money from unidentified sources outside the institution apparently were utilized to pay costs associated with the improper benefits made available to student athletes in this case. The availability of such funds in the past makes it imperative that the N.C.A.A. compel the university to take every precaution to avoid the improper use of such resources in the future."

Mr. Berst added that Wichita State, which has been penalized six times since the N.C.A.A. enforcement program began in the 1950's, now holds the association record for penalties.

—LORENZO MIDDLETON

Summary of Most Common Rule Violations in Sports

HOUSTON

Following is a summary of the most common violations of National Collegiate Athletic Association rules from 1978 through 1981 and the number of times they were committed:

More than 20 Times

Improper transportation or entertainment of prospective athletes or their families.

Improper recruiting inducements to prospective athletes, including cash payments, use of automobiles, free clothing, housing, or promises of such benefits.

Extra benefits to enrolled athletes, such as cash payments, special bank loans, use of automobiles, meals, and clothing.

10 to 20 Times

Improper financial aid, including payment of personal costs for athletes.

Failure to give athletes adequate notice that their scholarships will not be renewed.

Financial aid in excess of amount permitted.

Unearned academic credits to athletes.

Intentional serious violations by athletic administrators, or denial of allegations later found to be true.

Improper recruiting contacts.

Improper workouts with team members by prospective athletes.

4 to 10 Times

Failure to prevent improper recruiting activities by outside athletic representatives ("boosters").

Out-of-season practices.

Athletes permitted to play for more years than they were eligible.

1 to 3 Times

Monetary compensation to students for participating in college sports.

Rules violated with knowledge of college president.

Improper contacting of news media by coaches, excessive number of games played in one season.

Athletes ineligible because of low grade-point average.

Excessive number of scholarships awarded.

Excessive number of coaches.

Failure to cooperate with enforcement procedures.

Censorship

Continued from Preceding Page

Academy of Sciences and former science adviser to President Carter, said censoring the publication of scientific data to prevent the Soviet Union or other adversaries from using them, as implied in the proposal, would be "a regressive step."

"The damage would be so great as not to warrant the little good that it would do," he said. "It's the price we have to pay for a free society."

'The Tides Are Moving'

A Congressional Research Service report released last week concludes that the United States is losing the technological edge that has enabled it to counter the Soviet bloc's military superiority in men and equipment.

The report, commissioned by Rep. Ike Skelton, Democrat of Missouri, says a major problem is that the Soviets have five times as many engineering students as the United States has.

"I think the tides are moving, and they are moving pretty fast toward legislative solutions" to limit open scientific communication, Admiral Inman said.

"It's important for the professional [science] societies to take the lead to define the national security areas of concern before the public overreacts with legislation."

While Pentagon and university officials have been working in past months to resolve their differences on limiting foreign scholars' participation in research, the A.A.A.S. and other scientific organizations are strongly opposed to any restrictions on open scientific communication among U.S. scientists.

"The whole basis on which scientific research makes progress is by open disclosure," said Mr. Carey of the A.A.A.S. "Those rights are going to be strongly usurped" by limitations on scientific publication and presentations to colleagues, he said.

Government Control Seen

Mr. Carey said Admiral Inman's proposal that scientists voluntarily control their colleagues' data really amounted to government control, because federal officials would have to advise the scientists about the types of research results that should not be disclosed.

Such a system would be "a nightmarish situation, for the reason that it wouldn't be Bobby Inman who would be reading the proposals, but intelligence types," Mr. Carey said.

While serving as director of the National Security Agency, Admiral Inman required researchers in cryptography, the mathematical science of making and breaking codes, to submit their papers to the N.S.A. before publication.

The agency followed this practice for several years until last April, when it, the National Science Foundation, and the American Council on Education cooperated to develop a voluntary review system in which scientists submit papers to the agency for clearance before they are published.

About 25 papers have been reviewed since then and none has produced security concerns, said Daniel C. Schwartz, former general counsel for the agency.

Mr. Press said the system of review was an "interesting" way to deal with the problem, but added that he had reservations about applying it to all scientific fields.

Arms Control Act

One legislative measure, HR 109, introduced last year, would give the Secretaries of Defense, Energy, and State the authority to decide what type of information could be controlled under the Arms Export Control Act. The act was designed to curb the export of materials that can quickly be applied to military purposes.

The measure, introduced by Rep. Charles E. Bennett, Democrat of Florida, remains in the House Foreign Affairs Committee and has gained no additional sponsors.

The bill has been opposed by the Association for Computing Machinery, an organization of computer scientists, which contended that it could "encroach on First Amendment and other rights."

"By treating ideas in the same category as military hardware [regulated under the Act]," the group said, "this bill extends unreasonably the ability of the government to control what technical ideas its citizens can publish."

"The U.S. scientific community has a proven record of success in promoting national interests," said Peter J. Denning, chairman of Purdue University's computer-science department and president of the association.

"Government intervention to reduce risk clearly would upset this system, reduce its effectiveness, create friction with the scientific community, and not work. This is why I believe that control over scientific publication would not significantly reduce the risk to national security but would exact a cost to technology and science."

Mr. Denning said the present policy of open scientific communication had helped transform ideas into technological improvements, which in turn have promoted the economic leadership of the country.

"The policy of secrecy would seriously weaken this system," he said. "If you want to win the Indianapolis 500 race, you build the fastest car. You don't throw nails on the track."

—KIM McDONALD

FACT-FILE

Mean Scores of 473,944 Applicants Who Took ETS's Test of English as a Foreign Language

	Number of cases	Listening comprehension	Structure and written expression	Reading comprehension and vocabulary	Mean total score
AFRICA					
Algeria	620	52	49	50	501
Angola	32	53	47	49	497
Benin (Dahomey)	28	49	49	49	491
Botswana	70	57	56	56	568
Cameroon	428	52	54	53	528
Cape Verde Islands	81	51	46	47	482
Congo	20	44	45	46	452
Djibouti	15	51	49	50	498
Egypt	3,912	50	47	48	485
Ethiopia	785	53	50	49	506
Gambia	76	52	51	51	514
Ghana	2,505	53	58	57	560
Guinea	37	45	42	44	438
Ivory Coast	440	49	49	50	495
Kenya	1,161	55	57	55	554
Lesotho	38	56	58	56	566
Liberia	375	53	51	51	517
Libya	3,262	48	41	41	433
Madagascar	34	50	51	54	515
Malawi	60	58	59	58	584
Mali	58	46	42	47	449
Morocco	457	52	50	51	514
Mozambique	16	56	52	55	544
Niger	37	49	51	52	507
Nigeria	15,020	49	52	52	512
Rhodesia (now Zimbabwe)	382	55	57	55	558
Senegal	98	50	50	50	499
Sierra Leone	276	53	53	53	532
Somalia	274	49	47	49	485
South Africa	139	59	58	58	585
Sudan	901	47	48	48	475
Swaziland	35	59	57	56	571
Tanzania	379	53	54	54	539
Togo	28	48	49	52	496
Tunisia	191	51	49	50	498
Uganda	225	54	57	55	550
Upper Volta	28	49	50	51	502
Zaire	216	48	47	48	475
Zambia	230	55	55	54	547
AMERICAS					
Argentina	1,161	55	52	56	541
Bolivia	829	53	47	50	502
Brazil	4,263	51	48	52	506
Canada	679	58	52	55	551
Chile	1,229	54	49	53	520
Colombia	3,331	53	48	51	508
Costa Rica	750	54	49	52	513
Cuba	328	55	50	54	532
Dominican Republic	397	54	48	51	511
Ecuador	929	53	47	51	505
El Salvador	1,154	54	48	51	509
Guadeloupe	15	54	51	50	516
Guatemala	583	55	49	53	525
Guyana	58	58	56	57	572
Haiti	945	52	50	52	512
Honduras	616	54	48	51	509
Jamaica	51	59	55	55	561
Mexico	5,627	53	48	53	514
Netherlands Antilles	330	60	53	53	552
Nicaragua	847	54	47	50	500
Panama	1,134	53	47	50	501
Paraguay	103	53	49	53	515
Peru	1,746	53	48	52	509
Puerto Rico	1,181	55	49	53	525
Saint Martin	26	54	51	52	523
Surinam	110	58	53	52	544
Trinidad	38	61	58	57	584
United States	783	59	55	55	561
Uruguay	216	57	53	56	551
Venezuela	9,141	50	45	49	481
ASIA					
Afghanistan	183	52	45	46	478
Bangladesh	1,788	49	49	52	501
Bhutan	20	50	52	52	515
Brunei	154	54	49	50	513
ASIA (Continued)					
Burma	303	52	49	50	504
Cambodia	125	52	47	48	489
China	66,894	50	48	50	496
Hong Kong	43,566	51	49	51	505
India	20,362	54	55	56	550
Indonesia	6,645	51	46	48	483
Japan	37,064	50	48	48	483
Korea	17,631	49	50	52	504
Laos	102	51	44	44	465
Macao	834	51	50	51	503
Malaysia	15,299	57	53	54	545
Mauritius	108	54	54	54	541
Nepal	290	50	52	54	521
Pakistan	6,165	53	51	53	520
Philippines	10,594	56	53	55	546
Singapore	3,102	58	54	56	562
Sri Lanka	1,018	55	55	56	554
Thailand	16,004	49	46	46	470
Vietnam	3,046	52	48	50	502
EUROPE					
Austria	269	59	56	56	566
Azores	30	56	52	51	532
Belgium	768	59	56	58	574
Bulgaria	43	55	51	53	526
Cyprus	2,411	52	48	47	490
Czechoslovakia	155	57	52	54	543
Denmark	487	62	57	57	585
Finland	544	60	56	55	570
France	3,941	56	54	57	557
Germany	4,042	59	57	57	577
Great Britain	204	58	55	56	564
Greece	7,941	53	49	48	502
Hungary	136	56	52	55	545
Iceland	320	60	56	54	568
Ireland	20	61	58	59	593
Italy	1,853	55	54	56	549
Luxembourg	53	60	58	59	592
Malta	21	62	60	59	605
Netherlands	1,456	62	57	58	591
Norway	1,350	60	55	54	563
Poland	699	55	51	52	527
Portugal	411	55	51	53	531
Rumania	414	55	51	55	539
Spain	1,150	55	52	55	541
Sweden	1,111	62	56	57	582
Switzerland	1,161	58	55	56	567
Turkey	3,577	53	48	49	498
U.S.S.R.	1,354	55	50	51	519
Yugoslavia	502	55	50	51	519
MIDDLE EAST					
Bahrain	466	52	45	43	468
Iran	47,345	51	44	44	465
Iraq	2,071	50	45	45	462
Israel	3,458	57	51	51	531
Jordan	11,699	49	44	44	457
Kuwait	2,338	49	42	42	441
Lebanon	8,306	52	47	46	483
Oman	103	51	46	45	473
Qatar	281	48	41	40	433
Saudi Arabia	6,998	49	42	41	441
Syria	1,912	51	46	46	477
United Arab Emirates	550	49	42	41	442
Yemen	436	49	45	44	460
PACIFIC REGION					
American Samoa	1,283	48	41	41	437
Australia	231	55	50	50	518
Caroline Islands	779	49	42	42	443
Fiji	116	56	53	53	539
Mariana Islands	126	54	46	47	492
Marshall Islands	163	45	38	39	409
Tahiti	76	52	48	50	499
Tonga	232	48	43	43	448
Western Samoa	121	51	44	44	461

Note: Total scores are reported on a scale of 200 to 800. Data are based on 473,944 foreign students seeking admission to institutions in the United States who took the Test of English as a Foreign Language (TOEFL) from September 1978 through August 1980. This figure includes 25,399 students who did not report their country of birth, who reported English as their native language, or whose native language could not be determined. Means are not reported for subgroups of less than 15 for a total of 186 applicants.

SOURCE: EDUCATIONAL TESTING SERVICE

CHRONICLE SURVEY

College and University Expenditures

Changes from 1978-79 to 1979-80, by type of institution and category of expense

	Private Institutions					*Public Institutions*				
	Change from 1978-79 to 1979-80				Share of total spending in 1979-80	Change from 1978-79 to 1979-80				Share of total spending in 1979-80
	Average (a)	Low (b)	Median (c)	High (d)	(e)	Average (a)	Low (b)	Median (c)	High (d)	(e)
Institutions of all types										
Total educational and general expenditures	+12.7%	+9.4%	+12.4%	+15.0%	100.0%	+10.3%	+6.9%	+9.9%	+13.6%	100.0%
Instruction	+13.4%	+7.0%	+10.7%	+15.3%	41.1%	+8.2%	+5.1%	+8.5%	+11.7%	47.2%
Research	+12.6%	0.0%	0.0%	+10.9%	17.8%	+24.1%	0.0%	0.0%	+11.5%	11.2%
Public service	+14.2%	0.0%	0.0%	+11.4%	1.2%	+25.8%	0.0%	+6.1%	+31.0%	3.3%
Academic support	+11.5%	+3.9%	+11.8%	+18.6%	12.0%	+9.8%	-1.8%	+8.0%	+16.6%	10.7%
Student services	+12.1%	+6.6%	+12.7%	+17.1%	5.4%	+11.0%	+4.6%	+9.8%	+19.6%	6.1%
Institutional support	+15.3%	+5.3%	+13.4%	+20.5%	12.5%	+15.2%	+5.7%	+10.6%	+21.0%	10.7%
Plant operation and maintenance	+10.3%	+5.0%	+15.6%	+22.2%	10.1%	+9.7%	+3.0%	+10.0%	+14.8%	10.9%
Auxiliary enterprises	+11.8%	+6.4%	+10.2%	+15.2%	—	+14.3%	0.0%	+9.6%	+16.7%	—
Hospitals and independent operations	+2.8%	0.0%	0.0%	0.0%	—	+11.6%	0.0%	0.0%	0.0%	—
Total expenditures	+13.0%	+9.1%	+11.6%	+14.4%	—	+11.1%	+7.5%	+9.9%	+13.7%	—
Research universities										
Total educational and general expenditures	+13.1%	+10.9%	+11.6%	+15.1%	100.0%	+11.0%	+8.9%	+10.0%	+10.7%	100.0%
Instruction	+14.6%	+10.1%	+12.9%	+17.0%	38.3%	+9.6%	+7.0%	+8.0%	+9.1%	40.1%
Research	+16.3%	+12.6%	+17.1%	+19.8%	26.1%	+13.0%	+9.4%	+11.8%	+16.1%	24.8%
Public service	+14.1%	0.0%	0.0%	+20.6%	1.0%	+16.4%	+11.3%	+20.4%	+47.5%	4.8%
Academic support	+10.6%	+9.2%	+13.0%	+16.3%	13.0%	+11.7%	+5.2%	+8.9%	+15.6%	10.5%
Student services	+11.3%	+5.4%	+13.6%	+18.5%	3.0%	+10.7%	+5.8%	+9.9%	+16.1%	3.7%
Institutional support	+16.8%	+6.8%	+13.3%	+18.9%	10.0%	+14.2%	+9.1%	+12.7%	+22.7%	7.2%
Plant operation and maintenance	+7.7%	+3.9%	+9.5%	+20.5%	8.8%	+9.7%	+5.3%	+10.0%	+15.2%	8.9%
Auxiliary enterprises	+13.2%	+9.6%	+11.0%	+19.9%	—	+19.3%	+4.1%	+11.1%	+16.6%	—
Hospitals and independent operations	+17.4%	0.0%	0.0%	+16.9%	—	+17.2%	0.0%	+5.9%	+16.3%	—
Total expenditures	+13.9%	+11.0%	+13.2%	+14.6%	—	+12.5%	+8.3%	+10.6%	+11.5%	—
Other Ph.D.-granting universities										
Total educational and general expenditures	+12.5%	+11.5%	+12.9%	+14.9%	100.0%	+9.6%	+6.0%	+9.1%	+11.8%	100.0%
Instruction	+13.2%	+9.4%	+12.0%	+18.1%	46.4%	+7.5%	+5.8%	+7.2%	+8.7%	51.4%
Research	+6.9%	0.0%	+10.4%	+23.7%	11.1%	+20.4%	+9.8%	+22.7%	+43.4%	5.5%
Public service	+17.9%	-6.0%	+4.7%	+28.9%	2.2%	+48.9%	+9.9%	+23.1%	+83.9%	2.3%
Academic support	+11.2%	+4.6%	+12.7%	+15.0%	12.7%	+6.7%	-6.2%	+6.9%	+15.1%	12.7%
Student services	+14.1%	+8.8%	+11.1%	+16.6%	6.2%	+3.9%	+4.6%	+5.5%	+20.1%	5.3%
Institutional support	+11.4%	+7.3%	+13.5%	+20.5%	12.0%	+10.6%	+10.4%	+11.3%	+30.8%	10.5%
Plant operation and maintenance	+12.5%	+3.8%	+10.2%	+20.1%	9.5%	+11.2%	+9.0%	+12.5%	+14.3%	12.3%
Auxiliary enterprises	+9.5%	+8.4%	+12.1%	+15.2%	—	+11.1%	+8.4%	+13.6%	+16.1%	—
Hospitals and independent operations	+16.5%	0.0%	0.0%	0.0%	—	+17.0%	0.0%	0.0%	0.0%	—
Total expenditures	+12.4%	+9.7%	+12.3%	+14.6%	—	+10.9%	+8.3%	+9.8%	+12.5%	—
Comprehensive colleges and universities										
Total educational and general expenditures	+12.1%	+10.0%	+12.0%	+15.1%	100.0%	+10.2%	+6.3%	+9.9%	+12.1%	100.0%
Instruction	+10.6%	+8.4%	+10.3%	+15.0%	46.3%	+8.6%	+4.6%	+8.3%	+11.5%	50.5%
Research	+17.7%	0.0%	0.0%	+5.6%	6.2%	+25.6%	0.0%	+8.9%	+61.2%	3.0%
Public service	+5.8%	0.0%	0.0%	+12.6%	1.3%	+19.8%	-2.1%	+9.9%	+91.5%	2.6%
Academic support	+10.2%	+2.7%	+9.6%	+18.6%	9.4%	+4.6%	-1.7%	+5.6%	+18.4%	10.6%
Student services	+12.3%	+7.9%	+12.2%	+15.9%	8.3%	+14.5%	+6.6%	+11.1%	+23.3%	8.2%
Institutional support	+11.5%	+2.4%	+11.4%	+19.8%	15.8%	+19.5%	+8.8%	+11.7%	+23.8%	12.8%
Plant operation and maintenance	+16.6%	+10.5%	+18.3%	+25.4%	12.7%	+7.0%	-0.4%	+9.8%	+13.1%	12.4%
Auxiliary enterprises	+12.2%	+7.8%	+10.8%	+17.1%	—	+9.8%	+1.5%	+9.9%	+16.6%	—
Hospitals and independent operations	-3.4%	0.0%	0.0%	0.0%	—	+9.3%	0.0%	0.0%	0.0%	—
Total expenditures	+12.1%	+9.6%	+11.9%	+14.4%	—	+10.2%	+7.1%	+9.0%	+11.7%	—
2-year colleges										
Total educational and general expenditures	+11.2%	+6.3%	+11.0%	+15.2%	100.0%	+9.8%	+6.9%	+11.0%	+15.1%	100.0%
Instruction	+12.6%	+2.2%	+12.6%	+17.0%	41.9%	+5.6%	+4.6%	+9.8%	+17.7%	53.4%
Research	-100.0%	0.0%	0.0%	0.0%	0.0%	+46.2%	0.0%	0.0%	0.0%	0.0%
Public service	-22.0%	0.0%	0.0%	0.0%	1.2%	+35.0%	-2.9%	0.0%	+18.9%	1.8%
Academic support	+10.6%	-6.9%	+6.3%	+17.9%	7.4%	+15.3%	-6.5%	+8.0%	+17.4%	9.6%
Student services	+11.7%	+5.0%	+13.0%	+21.4%	11.8%	+12.3%	+2.3%	+9.0%	+22.5%	8.7%
Institutional support	+6.5%	-1.3%	+11.5%	+24.7%	22.2%	+14.5%	+1.7%	+8.9%	+20.8%	14.7%
Plant operation and maintenance	+16.8%	+2.6%	+17.4%	+29.4%	15.4%	+12.1%	+2.6%	+10.4%	+17.3%	11.7%
Auxiliary enterprises	+10.2%	+3.3%	+9.6%	+19.6%	—	+13.0%	0.0%	+8.2%	+21.0%	—
Hospitals and independent operations	-100.0%	0.0%	0.0%	0.0%	—	0.0%	0.0%	0.0%	0.0%	—
Total expenditures	+10.5%	+5.9%	+11.0%	+14.3%	—	+10.1%	+7.7%	+11.5%	+15.3%	—
Selective liberal-arts colleges										
Total educational and general expenditures	+12.6%	+9.8%	+13.0%	+14.0%	100.0%					
Instruction	+10.0%	+7.9%	+9.4%	+14.0%	46.0%					
Research	+26.6%	-24.2%	0.0%	+23.4%	0.9%					
Public service	+15.5%	0.0%	0.0%	+2.3%	0.8%					
Academic support	+17.5%	+6.2%	+14.3%	+19.1%	9.6%					
Student services	+13.5%	+6.2%	+13.2%	+17.3%	10.8%					
Institutional support	+16.8%	+10.1%	+14.8%	+23.6%	17.5%					
Plant operation and maintenance	+15.7%	+9.2%	+16.0%	+21.0%	14.5%					
Auxiliary enterprises	+9.2%	+5.9%	+9.2%	+12.3%	—					
Hospitals and independent operations	+8.3%	0.0%	0.0%	0.0%	—					
Total expenditures	+11.8%	+9.8%	+11.0%	+13.4%	—					
Less selective liberal-arts colleges										
Total educational and general expenditures	+11.6%	+7.5%	+13.2%	+16.1%	100.0%					
Instruction	+10.6%	+3.4%	+10.4%	+15.8%	42.3%					
Research	+15.2%	0.0%	0.0%	0.0%	1.0%					
Public service	+25.9%	0.0%	0.0%	+10.2%	0.9%					
Academic support	+15.0%	+3.3%	+12.6%	+24.5%	9.1%					
Student services	+12.6%	+6.4%	+12.4%	+18.7%	12.2%					
Institutional support	+17.9%	+10.1%	+13.7%	+21.1%	21.6%					
Plant operation and maintenance	+13.0%	-3.7%	+14.9%	+26.4%	13.0%					
Auxiliary enterprises	+9.2%	+3.7%	+9.7%	+16.4%	—					
Hospitals and independent operations	-97.7%	0.0%	0.0%	0.0%	—					
Total expenditures	+10.1%	+7.2%	+11.3%	+15.7%	—					

(a) Mean increase or decrease, 1979-80 compared with 1978-79.
(b) One-fourth of the institutions reported increases smaller than this.
(c) One-half of the institutions reported increases larger than this.
(d) One-fourth of the institutions reported increases larger than this.
(e) Percentage distribution of 1979-80 expenditures.

Note: Survey data are based on information from 133 private institutions and 100 public institutions in a stratified random sample and are part of a continuing series of studies by W. John Minter and Howard R. Bowen. Research for the public institutions' financial data for 1979-80 was underwritten in part by the American Association of State Colleges and Universities, the American Association of Community and Junior Colleges, and the National Association of State Universities and Land-Grant Colleges. A technical report on survey design and sampling statistics will be available later from John Minter Associates. Specific questions may be addressed to John Minter Associates, P.O. Box 107, Boulder, Colo. 80306.

SOURCE: MINTER-BOWEN STUDY OF AMERICAN HIGHER EDUCATION

1979-80 Spending Up 13 Pct. at Private Colleges, 11 Pct. at Publics

Operating expenses at private colleges and universities increased in fiscal 1980 by 13 per cent, the Chronicle Survey has found. At public institutions they went up 11 per cent.

The increases in expenses approximately matched the increases in operating revenues in the same period. Total operating revenues for fiscal 1980 were up 14.4 per cent at private institutions and 11.9 per cent at public institutions (*The Chronicle*, January 13).

The survey's financial data are part of a continuing study of American higher education by W. John Minter, head of an education-research company in Boulder, Colo., and Howard R. Bowen, professor of economics and education at the Claremont Graduate School.

At public colleges and universities, the sharpest increases in spending were for research—up 24.1 per cent—and for public services—up 25.8 per cent. Public-service budgets primarily support noninstructional services for groups outside the institution, including seminars, community services, and cooperative extension services.

The average increases at private institutions were 12.6 per cent for research and 14.2 per cent for public services.

The amount spent on instruction, which accounts for more than 40 per cent of operating costs at public colleges and universities, increased by 8.2 per cent over the previous year—not as much as total operating costs, which increased by 11 per cent.

At private colleges and universities, spending for instruction rose by 13.4 per cent—about the same rate as their total spending.

The amount spent for academic support, which includes libraries, museums, audiovisual services, and academic administration, increased by an average of 11.5 per cent at private institutions and 9.8 per cent at public institutions.

Money spent on student services, a category that includes admissions, counseling, financial-aid administration, and extracurricular programs, went up 11 per cent at public institutions and 12.1 per cent at private institutions.

Institutional support, which includes general administrative services and legal and fiscal operations, cost both public and private institutions 15 per cent more than in the previous year.

Spending for plant operation and maintenance rose by about 10 per cent at both types of institution.

The total for educational and general expenditures increased 10.3 per cent at public institutions and 12.7 per cent at private institutions.

The public institutions, on the average, spent 14.3 per cent more on auxiliary enterprises in fiscal 1980 than in the preceding year, although their revenue from auxiliary enterprises during the same period increased by only 12.5 per cent.

Private institutions increased spending on auxiliary enterprises by 11.8 per cent, which compared with a 14.7 per cent increase in revenue from that source.

Auxiliary enterprises include residence halls, food services, college stores, intercollegiate athletics, and other services to students, faculty, or staff for which fees are charged to cover all or most of the costs.

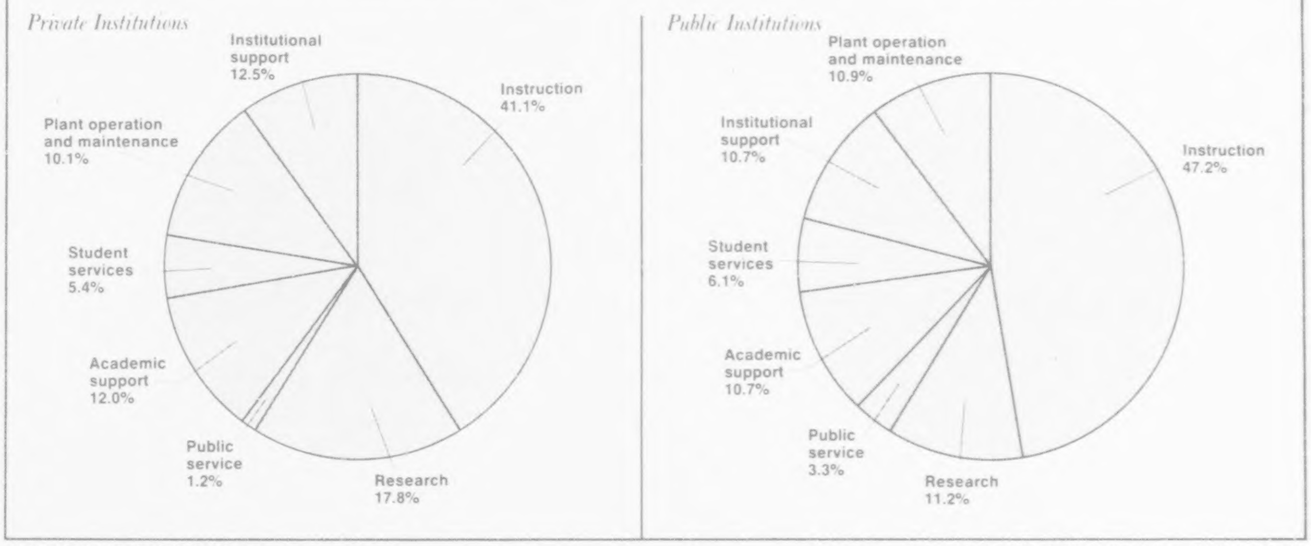
Spending for the operation of hospitals, which is averaged over all institutions whether they have hospitals or not, rose 11.6 per cent at public institutions and 2.8 per cent at private institutions.

The data are from audited financial statements of 133 private colleges and universities and 100 public institutions in a stratified random sample.

Additional findings of the Minter-Bowen study will be reported in future issues of *The Chronicle*.

—JACK MAGARRELL

HOW COLLEGES SPENT THEIR MONEY IN 1979-80



CHRONICLE CHART BY PETER H. STAFFORD

SOURCE: MINTER-BOWEN STUDY OF AMERICAN HIGHER EDUCATION

NATIONAL CENTER FOR HIGHER EDUCATION MANAGEMENT SYSTEMS

PRESENTS THESE SEMINARS FOR WINTER/SPRING 1982

Dynamics of Decisionmaking in Colleges and Universities *Leader:* J. Victor Baldridge	Honolulu February 1-2	Washington, D.C. March 1-2	Seattle April 1-2	Los Angeles April 5-6	
Strategic Planning in the Higher Education Setting *Leader:* Robert Shirley	Phoenix March 9		Minneapolis April 26	Tulsa April 27	
Legal Planning in Colleges and Universities in the 80's *Leader:* Philip R. Moots	Washington, D.C. February 2-3	Chicago March 29-30			San Francisco May 3-4
Evaluating Higher Education: The Institution, Its Programs, Administrators, and Faculty *Leader:* Richard I. Miller	Honolulu February 4-5		Louisville April 22-23		Washington, D.C. May 6-7
Enrollment Planning: Strategic Issues and Institutional Implications *Leader:* Larry Leslie	Phoenix March 10-11	New York City March 24-25	St. Louis April 3-4	Tulsa April 28-29	Washington, D.C. May 12-13
The Nature and Role of Information for Management in Higher Education *Leaders:* Paul T. Brinkman & Dennis Jones					Washington, D.C. May 10-11
Improving Administrative Effectiveness *Leaders:* David A. Whetten & Kim Cameron		Honolulu March 29-30			Boston May 20-21

For additional information or to register, contact: Sheryl Meek, Meeting Coordinator, NCHEMS, P.O. Drawer P, Boulder, Colorado 80302, (303) 497-0365

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News Summary

Articles on inside pages

A six-year battle over the ownership of laboratory-produced human cells has been settled out of court. Story on Page 3.

Administrators of Ohio's public colleges and universities may soon have to cope with 17-per-cent budget cuts. Story on Page 4.

The president of Wichita State University is fighting charges that his is a "basketball crazy" institution. Story on Page 5.

World-history courses are benefiting from many colleges' return to "core" curricula. Story on Page 7.

No longer will the National Academy of Sciences transmit State Department requests asking universities to restrict foreign scholars' campus activities. Story on Page 9.

The Congressional session beginning this week may be dominated by debate over new cutbacks in education and other social programs. Story on Page 9.

The Education Department has dropped a proposal that could have freed several hundred postsecondary institutions from coverage by civil-rights laws. Story on Page 9.

Controversy seems to be an integral part of selecting a new chairman of the National Endowment for the Humanities. Story on Page 13.

Some scholars are being pressed by publishers to undertake time-consuming revisions of textbooks more frequently. Story on Page 17.

The French government has committed itself to dramatically increased support for research and development. Story on Page 15.

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FIRE AND ICE MIX AT AN IOWA STATE FRATERNITY HOUSE

WIDE WORLD

A 17-hour fire gutted the Phi Gamma Delta fraternity house at Iowa State University after a burning fireplace log lodged in the wall of an ash chute. No students were hurt, but five firemen were treated for exposure after fighting the blaze in temperatures near 20 degrees below zero.

Reagan Plan on Tax Exemptions to Be Fought by Some Legislators and Civil-Rights Leaders

By CHERYL M. FIELDS

WASHINGTON

President Reagan sent Congress a bill last week that would bar tax exemptions for racially discriminatory colleges and schools, but the controversy over the Administration's stand on the issue raged on.

Some civil-rights leaders and lawmakers said they would oppose the legislation, arguing that the Internal Revenue Service already has ample authority to bar exemptions for such institutions, and that the proposed legislation might be weakened by conservative lawmakers in Congress or used as a tool to soften other civil-rights laws.

Meanwhile, until Congress passes legislation—or the courts intervene—Bob Jones University and Goldsboro Christian Schools in North Carolina will have the tax exemptions they gained when the Reagan Administration initially announced it would no longer deny them to racially discriminatory institutions.

Seeking to Blunt Criticism

In sending the bill to Capitol Hill, the President sought to blunt the sharp criticism the Administration received after the Internal Revenue Service announced on January 8 that it was dropping an 11-year-old policy of denying tax exemptions to educational institutions with racially discriminatory policies—because it believed it lacked the legal authority to do so.

The President and virtually all of his top aides acknowledged that the issue had been handled badly and that they had not anticipated the strong public reaction to the I.R.S. move—which critics said would allow valuable tax exemptions for the private "academies" set up in some Southern states to avoid desegregation of public schools.

Mr. Reagan insisted that personally he strongly opposed racial discrimination, and that the issue had been seen by the White House as a "procedural," not a civil-rights, issue—since officials believed the I.R.S. was trying to enforce social policy without having statutory authority to do so.

But Mr. Reagan said he took the blame

Continued on Page 14, Column 1

Poland Adds Strict Rules as Several Campuses Reopen

By SUE MASTERMAN

VIENNA

Polish officials permitted classes to resume at some institutions of higher education last week, but they applied strict measures to assure that rectors, faculty members, and students observed government bans on all political activity.

According to some accounts, Henryk Samsonowicz, the rector of Warsaw University, has been dismissed from the Communist Party as a first step toward removing him from his post. However, his dismissal could not be confirmed and Mr. Samsonowicz was still at the university last week.

Mr. Samsonowicz, a liberal who was popular with both students and faculty members, is said to have opposed the imposition of martial law and has refused to accept some of the conditions laid down by the government for the reopening of the university. According to sources at the university, government officials met with faculty members earlier this month and told them Mr. Samsonowicz had been presented with a list of conditions for the resumption of classes.

The university sources said that the rector had been told that there could be no meetings or demonstrations for political purposes on the campus and that faculty

Continued on Page 16, Column 1

CHRONICLE SURVEY

Inflation-Adjusted Changes in Average Revenue and Expenditures per Student at Colleges and Universities, Fiscal 1979 to Fiscal 1980

	Private institutions							Public institutions				
	All institutions	Research universities	Other Ph.D.-granting institutions	Compre-hensive institutions	2-year colleges	Selective liberal-arts colleges	Less selective liberal-arts colleges	All institutions	Research universities	Other Ph.D.-granting institutions	Compre-hensive institutions	2-year colleges
Educational and general revenue	**+ 0.9%**	**+ 2.0%**	**+ 1.2%**	**– 2.3%**	**– 4.6%**	**+ 0.1%**	**– 2.6%**	**– 2.4%**	**– 2.8%**	**– 2.6%**	**– 3.8%**	**+ 0.4%**
Tuition and fees	– 2.3%	– 2.4%	– 1.0%	– 3.5%	– 3.1%	– 3.4%	– 1.9%	– 3.2%	– 4.1%	+ 0.8%	– 3.6%	– 3.7%
State government	– 5.2%	– 2.3%	– 8.2%	– 11.4%	– 11.9%	– 11.0%	– 7.8%	– 2.9%	– 3.5%	– 4.9%	– 3.9%	+ 0.8%
Federal government	+ 5.8%	+ 4.1%	+ 10.0%	+ 0.5%	– 21.7%	+ 28.4%	+ 4.2%	– 1.1%	– 1.6%	– 1.8%	– 5.8%	+ 6.6%
Local government	—	—	—	—	—	—	—	– 2.0%	+ 5.6%	– 3.0%	– 13.7%	– 0.6%
Private gifts and grants	– 2.6%	– 1.2%	– 4.4%	– 4.7%	– 6.3%	+ 4.9%	– 12.4%	– 4.9%	– 1.3%	+ 0.6%	– 6.9%	– 13.1%
Endowment income	+ 1.4%	– 3.0%	+ 11.7%	+ 4.9%	+ 9.6%	+ 1.3%	+ 6.6%	+ 4.9%	+ 13.3%	+ 8.3%	+ 22.1%	– 36.1%
Other	+ 13.2%	+ 17.1%	+ 6.1%	+ 11.6%	+ 5.6%	+ 16.5%	+ 0.6%	+ 4.2%	– 1.1%	+ 10.1%	+ 7.7%	+ 5.5%
Auxiliary enterprises	+ 1.3%	+ 5.1%	– 4.8%	– 2.2%	– 4.6%	– 5.7%	– 4.1%	– 1.0%	+ 6.2%	– 6.3%	– 7.1%	– 3.4%
Hospitals and independent operations	– 8.5%	+ 4.1%	+ 7.8%	—	—	—	—	+ 0.9%	+ 6.6%	– 0.8%	—	—
Total revenue	**+ 1.0%**	**+ 2.6%**	**+ 0.9%**	**– 2.3%**	**– 5.1%**	**– 1.1%**	**– 3.7%**	**– 1.9%**	**– 0.9%**	**– 2.9%**	**– 4.4%**	**+ 0.2%**
Educational and general expenditures	**– 0.4%**	**+ 0.4%**	**0.0%**	**– 3.1%**	**– 4.4%**	**– 1.8%**	**– 3.1%**	**– 3.1%**	**– 2.6%**	**– 4.7%**	**– 4.6%**	**– 0.8%**
Instruction	+ 0.1%	+ 1.7%	+ 0.7%	– 4.3%	– 3.1%	– 4.0%	– 3.8%	– 5.0%	– 3.8%	– 6.5%	– 6.1%	– 4.6%
Research	– 0.1%	+ 3.3%	– 5.0%	+ 1.8%	– 78.5%	+ 10.9%	– 0.8%	+ 9.2%	– 0.8%	+ 4.7%	+ 8.7%	+ 32.0%
Public service	+ 0.8%	+ 1.2%	+ 4.9%	– 8.4%	– 32.9%	+ 1.3%	+ 7.6%	+ 10.5%	+ 2.2%	+ 29.5%	+ 3.7%	+ 21.9%
Academic support	– 1.6%	– 1.8%	– 1.2%	– 4.7%	– 5.2%	+ 2.6%	– 0.4%	– 3.5%	– 2.0%	– 7.2%	– 9.5%	+ 4.2%
Student services	– 1.1%	– 1.2%	+ 1.4%	– 2.9%	– 4.4%	– 0.9%	– 2.4%	– 2.5%	– 2.9%	– 9.6%	– 1.0%	+ 1.4%
Institutional support	+ 1.8%	+ 3.6%	– 1.0%	– 3.5%	– 8.5%	+ 1.8%	+ 2.4%	+ 1.2%	+ 0.3%	– 3.8%	+ 3.4%	+ 3.5%
Plant operation and maintenance	– 2.6%	– 4.4%	0.0%	+ 0.9%	+ 0.4%	+ 0.9%	– 1.9%	– 3.6%	– 3.7%	– 3.3%	– 7.4%	+ 1.3%
Auxiliary enterprises	– 1.3%	+ 0.4%	– 2.7%	– 3.0%	– 5.2%	– 4.7%	– 5.0%	+ 0.4%	+ 4.7%	– 3.4%	– 5.0%	+ 2.1%
Hospitals and independent operations	– 8.9%	+ 4.2%	+ 3.6%	—	—	—	—	– 0.1%	+ 2.8%	+ 1.7%	—	—
Total expenditures	**– 0.2%**	**+ 1.1%**	**0.0%**	**– 3.1%**	**– 5.0%**	**– 2.5%**	**– 4.3%**	**– 2.4%**	**– 1.3%**	**– 3.6%**	**– 4.7%**	**– 0.6%**

— Insufficient data or not applicable.

Note: Average changes are adjusted for 12.5-per-cent inflation, as indicated by 1978-79 and 1979-80 averages of the Labor Department's Consumer Price Index, and for full-time-equivalent enrollment in the fall of 1978 and 1979. Survey data are based on information from 133 private institutions and 100 public institutions in a stratified random sample and are part of a continuing series of studies by W. John Minter and Howard R. Bowen. Research for the public institutions' financial data for 1979-80 was underwritten in part by the American Association of State Colleges and Universities, the American Association of Community and Junior Colleges, and the National Association of State Universities and Land-Grant Colleges. A technical report on survey design and sampling statistics will be available later from John Minter Associates. Specific questions may be addressed to John Minter Associates, P.O. Box 107, Boulder, Colo. 80306.

SOURCE: MINTER-BOWEN STUDY OF AMERICAN HIGHER EDUCATION

Ohio Officials Warn Colleges of Possible 17-Pct. Budget Cut

COLUMBUS, OHIO

Ohio's public colleges and universities have been warned by state budget officials that their appropriations may be cut more than 17 per cent in the next six months and 16 per cent the following fiscal year.

Presidents and deans met in emergency weekend sessions to plan how they would deal with the reductions.

The Ohio Board of Regents said the magnitude of the impending reductions in state funds threatened to create a "condition of financial exigency" for higher education in the state.

Chancellor Edward Q. Moulton said the effects of the cuts would range from the "elimination of many essential services to the threat of closure for some institutions."

The financial alarm was sounded by Howard L. Collier, vice-president and treasurer of the Medical College of Ohio at Toledo, who had taken a year's leave of absence to return to his old job as state budget director.

Mr. Collier, who had served as state budget director twice before, took office January 1 and immediately ordered a complete review of the state's revenue estimates.

The estimates had been revised downward by $700-million in September. The revised estimates appeared to hold through October and November, said Mr. Collier's executive counsel, Edgar A. Troyer, but December brought "some dramatic drops in major tax sources."

Also in December, he said, the economic model used to project revenues was revised to take a more conservative approach in its forecasting.

After two weeks of the review ordered by Mr. Collier, "it became apparent that the problems were of much greater magnitude than anyone previously had thought," Mr. Troyer said.

The revised January projection for the period ending June 30, 1983, shows state revenues falling $847.7-million short of the amount appropriated.

Beyond that, the budget office warned that a rising number of welfare cases could push the deficit above the billion-dollar mark.

The State Controlling Board, a key financial committee of the Ohio legislature, was briefed by Mr. Collier and his staff last week on a "mathematical solution" to the problem of the deficit—how appropriations could be reduced to meet constitutional and statutory restrictions that limit spending to expected revenue. Different solutions could be devised by the legislature.

The budget director's solution relies heavily on cuts in funds for higher education.

Of the total expected deficit of $847.7-million, higher education would be asked to make up $204.6-million—24 per cent of the state's total deficit.

The budget cuts are aggravated, higher-education officials said, by their timing. Fiscal 1982, ending next June 30, is already more than half over. The institutions have already spent about half of the money and are committed, through contracts, for much of the rest.

The budget director's plan calls for reduction of $64.6-million in higher education's fiscal 1982 budget.

Such a reduction would mean a cut of 8.9 per cent from the full year's higher-education budget, but to achieve that in six months would mean cutting spending by more than 17 per cent.

For fiscal 1983, the budget office's plan calls for higher education to cut spending by $138-million, or 16.3 per cent of their appropriation.

Detailed, campus-by-campus plans for dealing with the threatened reduction were discussed by administrators, but final decisions awaited an official directive from the budget office, which was expected within a few days.

—JACK MAGARRELL

Higher Education's Hard Times May Have Begun, Survey Shows

The beginnings of the hard times forecast for higher education in the 1980's are apparent in Chronicle Survey reports that have been adjusted for changes in enrollment and inflation.

Over all, inflation-adjusted revenue per student at public colleges and universities dropped 1.9 per cent in fiscal 1980, compared with fiscal 1979.

Private institutions gained an average of 1 per cent in revenue during the same period, thanks primarily to the increased income of the larger universities, but losses were general among private colleges.

Spending per student for instruction, after adjusting for inflation, declined by 5 per cent at public colleges and universities and increased by only 0.1 per cent at private institutions.

Public colleges and universities increased their spending for research by 9.2 per cent, and for cooperative extension programs and other public services by 10.5 per cent, after adjusting for enrollment changes and inflation. Comparable figures for the private institutions showed a decline of 0.1 per cent for research and a gain of 0.8 per cent for public services.

The Chronicle Survey's financial data are based on audited reports from 133 private institutions and 100 public institutions. The data are part of a continuing study of American higher education by W. John Minter, head of an education-research company in Boulder, Colo., and Howard R. Bowen, professor of economics and education at the Claremont Graduate School.

Total operating revenue per student in fiscal 1980, after adjusting for inflation, increased by 2.6 per cent at private research universities and by 0.9 per cent at other private universities granting doctoral degrees.

Declines in adjusted revenue per student at other types of private institutions were: 2.3 per cent at comprehensive colleges (those having 1,500 students or more, a liberal-arts program, and at least one professional program), 5.1 per cent at two-year colleges, 1.1 per cent at the more selective liberal-arts colleges, and 3.7 per cent at the less selective liberal-arts colleges.

At both public and private institutions, revenue per student from tuition and fees lagged behind inflation, showing declines of 3.2 per cent at public institutions and 2.3 per cent at private institutions.

—JACK MAGARRELL

Harvard U. and Washington U. Get Stock Worth $115-Million from Trust

ST. LOUIS

The will of Edward Mallinckrodt, Jr., chairman of the board of Mallinckrodt Inc., a St. Louis chemical company, in 1967 gave 1.5 million shares of the company's stock to Harvard University, his alma mater, and 767,172 shares to Washington University, a hometown recipient of Mallinckrodt family philanthropy.

The stock was not given outright but was held in trust, with the income distributed to Harvard and Washington University for 15 years.

The terms of the trust agreement specified that the stock be turned over to the two universities in January, 1982, which happened to be a time when Mallinckrodt, Inc. was being taken over by another corporation, Avon Products, the cosmetic company.

Avon announced in December that it had agreed to acquire Mallinckrodt for $50 a share. Only a year earlier, a share had been valued at about $30.

The Avon offer boosted the value of Harvard's gift, now to be added to its endowment, to about $77-million, and made Washington University's share worth an estimated $38.3-million.

The $115-million total value of the two universities' Mallinckrodt stock prompted the New York *Times* to say that it was "believed to be the largest single gift in the history of American education."

Some higher-education officials, however, question whether stock given to two universities constitutes a single gift.

Further, when the bequest was made 15 years ago, its value was much lower than the present $50 a share. Even at last year's $30 a share, the total value would have been only about $68-million.

The apparent champion in the heavyweight division of single gifts to higher education is still the $105-million in Coca-Cola Company stock given by Robert W. Woodruff, retired president of the company, to Emory University in February, 1980.

Sometimes mentioned as a contender in the biggest-gift competition is New York University's macaroni money.

In September, 1976, New York University received $115-million from the sale of a macaroni factory. That was not actually a gift because the macaroni business already belonged to the university.

The C. F. Mueller Company of Jersey City, N.J., had been incorporated by alumni and friends of the university in 1947 to manufacture macaroni and contribute all its earnings to the N.Y.U. law school. —JACK MAGARRELL

FACT-FILE

1980-81 Ranking of Research Libraries in U.S., Canada

University libraries†	Rank by overall size‡	Volumes in library	Volumes added	Current serials	Spending for materials*	Spending for salaries*
Harvard U.	1	10,260,571	177,908	95,000	$5,728,552	$11,727,908
Yale U.	2	7,579,121	177,168	58,628	1,622,158	7,473,517
U. of California at Berkeley	3	5,927,773	169,101	104,793	3,890,000	9,700,000
U. of California at Los Angeles	4	4,346,526	111,304	65,788	3,637,295	9,235,283
Stanford U.	5	4,813,393	118,624	46,457	4,043,791	8,627,615
U. of Michigan	6	5,345,918	111,538	59,988	3,764,874	6,976,479
U. of Texas	7	4,702,122	150,041	60,000	4,504,655	6,453,783
U. of Toronto	8	4,623,880	175,570	44,147	3,595,212	9,568,719
U. of Illinois	9	6,091,125	154,302	93,913	3,158,596	6,252,306
Cornell U.	10	4,318,583	101,668	55,206	3,236,211	6,032,089
Columbia U.	11	5,112,559	96,099	59,196	2,785,598	6,940,844
U. of Washington	12	4,024,258	110,410	42,488	3,171,418	5,865,824
U. of Wisconsin	13	4,044,136	98,477	53,823	2,842,618	6,265,936
U. of Minnesota	14	3,870,712	56,390	43,651	2,545,691	6,670,078
U. of Br. Columbia	15	2,217,021	109,558	32,301	2,726,692	6,818,130
U. of No. Carolina	16	2,722,799	118,395	38,950	2,911,063	4,678,220
U. of Arizona	17	2,639,041	98,202	30,614	3,674,784	3,832,407
Ohio State U.	18	3,615,108	85,123	29,403	2,224,206	5,237,177
U. of Chicago	19	4,441,312	130,488	48,721	2,232,777	3,995,869
Indiana U.	20	3,856,121	96,918	26,462	2,799,242	5,040,146
Princeton U.	21	3,363,282	73,808	31,268	2,648,700	4,617,309
U. of Florida	22	2,231,509	68,527	44,112	2,897,884	3,865,691
U. of Pennsylvania	23	3,000,650	61,760	29,169	2,051,440	4,357,706
Pennsylvania St. U.	24	2,207,098	57,495	21,737	2,335,538	5,405,545
U. of Virginia	25	2,391,585	70,974	24,432	2,558,290	3,951,877
Rutgers U.	26	2,290,013	73,170	26,583	2,193,454	5,246,336
U. of California at Davis	27	1,681,545	75,279	44,084	2,798,138	4,725,310
New York U.	28	2,613,731	86,163	28,977	2,102,962	4,387,223
Northwestern U.	29	2,838,187	18,090	31,375	2,238,870	4,351,197
U. of So. California	30	2,105,389	69,819	30,766	2,236,454	3,999,372
State U. of New York at Buffalo	31	2,003,090	66,643	21,801	1,892,461	3,272,571
Duke U.	32	3,006,026	53,920	27,601	2,225,639	3,574,827
U. of Alberta	33	2,146,456	80,012	14,459	1,816,159	5,782,368
Michigan St. U.	34	2,707,779	93,731	20,090	1,848,294	3,598,687
U. of Georgia	35	2,062,499	76,853	32,413	2,253,589	2,966,976
U. of Iowa	36	2,356,096	60,830	28,234	2,591,725	3,204,700
U. of Kansas	37	2,214,824	66,373	27,796	2,268,756	3,331,246
U. of Maryland	38	1,472,031	68,463	16,737	1,965,580	4,009,298
U. of California at San Diego	39	1,426,747	47,792	27,629	2,021,583	4,341,351
U. of Pittsburgh	40	2,339,242	70,927	18,766	1,730,337	3,656,453
Virginia Polytechnic Inst. and State U.	41	1,285,615	59,578	23,114	1,851,220	2,398,304
Howard U.	42	1,159,411	43,015	21,194	2,677,650	4,172,076
U. of California at Santa Barbara	43	1,416,667	41,440	18,832	2,197,000	4,107,751
Syracuse U.	44	1,952,594	64,282	22,097	1,675,388	2,230,734
U. of Kentucky	45	1,816,782	24,734	34,204	1,773,131	2,609,478
Louisiana St. U.	46	1,884,656	62,030	19,378	2,523,571	2,535,346
McGill U.	47	2,068,383	63,798	15,300	1,583,709	5,570,603
Arizona State U.	48	1,527,021	58,371	18,371	1,983,121	2,604,606
Massachusetts Institute of Technology	49	1,844,451	46,828	19,593	1,335,824	3,061,527
Southern Illinois U.	50	1,666,953	36,128	20,015	1,769,921	3,006,981
U. of Missouri	51	2,068,788	52,141	21,379	$1,634,221	$2,381,550
Boston U.	52	1,347,343	32,601	23,440	1,661,003	2,624,192
U. of Cincinnati	53	1,287,691	39,106	17,900	2,372,272	3,251,141
U. of Hawaii	54	1,786,335	50,213	30,781	1,749,203	3,162,069
U. of South Carolina	55	1,894,264	66,824	15,809	1,716,334	2,335,999
Florida State U.	56	1,370,739	47,449	15,682	1,961,413	2,289,437
Washington U. (Mo.)	57	1,838,820	40,109	15,232	1,714,194	2,400,440
Washington State U.	58	1,265,979	34,255	29,900	1,339,622	2,803,579
Johns Hopkins U.	59	2,346,131	24,196	16,501	1,762,695	2,639,652
U. of Western Ontario	60	1,437,722	64,052	16,000	2,093,405	3,682,624
Purdue U.	61	1,468,805	43,909	17,755	1,630,768	3,065,969
Temple U.	62	1,641,057	48,208	15,531	1,533,356	3,005,658
U. of Nebraska	63	1,547,212	53,172	20,692	1,620,012	2,186,535
U. of Tennessee	64	1,392,009	35,640	24,166	1,465,859	2,311,658
Texas A&M U.	65	1,358,220	58,576	15,347	1,623,785	2,154,345
Wayne State U.	66	1,878,689	39,260	13,526	1,361,281	2,986,255
U. of Oklahoma	67	1,858,658	50,382	16,699	1,793,157	2,044,449
Brigham Young U.	68	1,523,507	59,289	17,319	n/a	n/a
Iowa State U.	69	1,401,520	51,611	18,615	1,655,289	2,319,190
Georgetown U.	70	1,284,346	43,183	17,842	1,593,940	2,927,592
Emory U.	71	1,641,141	46,821	14,782	1,760,746	2,129,263
State U. of New York, Stony Brook	72	1,272,783	45,976	17,774	1,559,802	2,432,972
U. of Rochester	73	1,745,000	45,000	12,500	1,500,000	2,234,000
U. of California at Irvine	74	984,797	45,785	13,558	1,891,629	3,026,078
U. of Miami	75	1,379,450	36,008	15,932	1,627,409	2,518,170
U. of Colorado	76	1,888,207	35,303	19,076	1,181,160	2,586,330
U. of Connecticut	77	1,689,508	57,572	15,304	1,597,073	2,640,566
York U.	78	1,329,396	56,845	11,833	1,452,808	2,939,472
U. of Houston	79	1,260,137	34,196	13,153	1,355,484	2,277,809
Vanderbilt U.	80	1,449,025	18,736	15,491	1,391,196	2,077,293
U. of Massachusetts	81	1,803,647	72,775	12,514	1,293,518	2,644,337
U. of Utah	82	1,990,000	39,944	14,600	1,212,493	2,270,723
Brown U.	83	1,709,261	37,847	14,871	1,251,646	1,345,109
U. of Oregon	84	1,502,404	28,046	20,000	1,274,319	2,283,658
Queen's U.	85	1,410,436	39,766	14,071	1,365,220	2,732,775
State U. of New York at Albany	86	980,464	43,600	15,297	1,353,414	2,032,581
U. of New Mexico	87	1,043,936	43,963	15,905	1,224,986	2,132,445
U. of Manitoba	88	1,217,053	36,282	12,450	1,251,021	3,116,055
Colorado State U.	89	1,278,162	45,239	16,641	1,016,568	2,098,683
McMaster U.	90	1,186,687	46,391	12,776	1,860,823	2,277,749
Dartmouth C.	91	1,433,938	43,221	18,234	1,325,349	1,623,912
U. of California at Riverside	92	1,033,177	52,924	14,403	780,924	2,540,467
Tulane U.	93	1,399,345	26,940	12,267	1,260,533	1,800,908
U. of Saskatchewan	94	1,038,148	38,010	10,184	1,421,536	2,290,273
Case Western Reserve U.	95	1,392,317	23,951	13,691	1,208,446	1,999,458
U. of Notre Dame	96	1,459,336	40,617	14,159	1,289,100	1,597,282
Rice U.	97	1,071,814	37,208	10,107	1,267,231	1,322,601
Kent State U.	98	1,396,885	44,793	8,694	820,679	1,869,524
U. of Guelph	99	1,238,575	84,036	8,792	1,266,033	2,068,178
U. of Alabama	100	1,170,644	40,356	12,685	1,327,485	1,418,205
Oklahoma State U.	101	1,277,829	24,777	14,011	1,043,851	1,215,313

† Libraries are not supposed to report figures for their branch campuses.

‡ Based on an index developed by the Association of Research Libraries for quantitative comparisons. The index takes into account volumes held; gross number of volumes added; microforms held; current serials received; expenditures for library materials, binding, salaries and wages, other operating costs; and number of professional and nonprofessional staff members.

* Figures for Canadian libraries are expressed in U.S. dollars.

n/a Data not available.

SOURCE: ASSOCIATION OF RESEARCH LIBRARIES

2-Step Process for Teacher Training Could Improve Schools, Boyer Says

NEW HAVEN, CONN.

Teacher-education and training programs must be strengthened and better students attracted to the profession if the quality of elementary and secondary education is to improve, says Ernest L. Boyer, president of the Carnegie Foundation for the Advancement of Teaching.

The programs must include "solid training in academic subjects and early apprentice experience in the classroom," Mr. Boyer told a group of educators at Yale University last week.

He also recommended that teacher training and teacher certification, which college departments of education provide as a continuous procedure in most states, be separated into a "two-step process." Under that arrangement, he said, a beginning teacher who is certified upon completing a degree program would have to undertake an apprenticeship—at a beginning salary level—before receiving a teaching license from the state.

Mr. Boyer also recommended recertification, perhaps every five years, as a way to identify and retain competent teachers and "weed out" those who are incompetent.

Stressing that teacher education should not be a "one-shot process," Mr. Boyer said school boards "must realize that lifelong education is essential" for all teachers. Educators cannot expect "a teacher trained 20 years ago to prepare students to live 40 years into the future, with no policy of systematic continued education," he said.

To provide more competent classroom teachers, said Mr. Boyer, whose foundation is conducting a two-year study of secondary schools, colleges must find ways to attract better students to the teaching profession. He called reports of education majors' steadily declining verbal and mathematics scores on the Scholastic Aptitude Test "enormously disturbing."

Colleges must find ways to reaffirm the importance of the teaching profession and overcome "the disdainful attitude of many academics," he said.

Good teachers who are leaving the profession might be persuaded to stay if the field offered more "career ladders," he said.

Too many teachers are deciding that to "get ahead" in the field they must become counselors or football coaches, he said.

More teachers, he added, might remain in the classrooms if they could "move forward within the profession." —BEVERLY T. WATKINS

Universities Buying Fewer Books Every Year, Association Reports

WASHINGTON

University libraries are buying fewer books every year, the Association of Research Libraries reports, because of the rising cost of journals, magazines, and other serial publications.

In a five-year period ending last summer, spending by university libraries for serials increased by an average of 13.8 per cent a year. Spending for books and other nonserial publications increased by 4.2 per cent a year.

Despite the increased spending, the number of volumes added to the libraries' collections went down by 3 per cent a year.

Collections of serials increased by only 1.7 per cent a year.

The report is based on data from 90 of the 101 university libraries that are members of the Association of Research Libraries.

The latest edition of the association's statistical report shows that 32 per cent of the libraries' total spending in fiscal 1981 went for books, serials, and other publications, the same proportion as in fiscal 1976.

Serials took an increasing share of the money that libraries spent on acquiring materials, up from 46 per cent in fiscal 1976 to 58 per cent in fiscal 1981.

Copies of the report, *ARL Statistics, 1980-81*, are available for $8 each for association members and $10 each for nonmembers, from the Association of Research Libraries, 1527 New Hampshire Avenue, N.W., Washington 20036. —J.M.

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News Summary

Articles on inside pages

The reading preferences of college students over the past 11 years have shifted substantially, and many students today seem to be "irresistibly drawn to the simple." Story on Page 21.

White men still outnumber women and members of minority groups by more than 3 to 1 in top administrative jobs at colleges and universities. Story and Fact-File on Page 4.

A researcher at Harvard University's medical school falsified data in three experiments, says an investigating committee. Story on Page 6.

Publication policies that delay the release of medical-research results to the public are under fire. Story on Page 6.

Controversy has widened over State Department restrictions on a Soviet scientist's plans to visit four universities. Story on Page 6.

Graduate enrollment is down 1.1 per cent, the biggest drop in five years, a new survey finds. Story and Fact-File on Page 8.

Higher education generally won't be part of the President's proposed shift of social programs to the states. Story on Page 15.

Many researchers may have been unduly discouraged about their chances of receiving federal grants this year. Story on Page 15.

Despite deep federal budget cuts, two universities recently managed to win a special appropriation to build medical facilities. Story on Page 15.

Italian universities have been paralyzed by the country's attempt to create a mass system of higher education, says a report. Story on Page 19.

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Colleges Urged to Alter Tests, Grading for Benefit of Minority-Group Students

A Ford Foundation commission endorses a system to admit students based on potential

By LORENZO MIDDLETON

NEW YORK

Colleges and universities should revise their testing and grading procedures for the benefit of minority-group students, a Ford Foundation commission said last week.

The Commission on the Higher Education of Minorities called on institutions of higher education to adopt a "value added" system, in which students would be admitted and evaluated "on the basis of their potential for learning and growth rather than their relative standing on tests and grades."

Reporting on the results of a three-year study, the commission concluded that traditional testing and grading methods in higher education had served mainly to "rank students in relation to each other." Those methods, the commission reported, "not only fail to contribute to the learning process, but also pose special obstacles to the development of minority students."

The study examined the progress over the past 15 years of blacks, Mexican-Americans, Puerto Ricans, and American Indians—groups that historically have been underrepresented in American higher education. It was conducted by the Higher Education Research Institute in Los Angeles and supervised by the commission.

The recommendations of the Commission on the Higher Education of Minorities are on Pages 10-14.

The commission reported that minority-group representation in the country's colleges and universities had increased substantially between the mid-1960's and mid-1970's as a result of the civil-rights movement, the Civil Rights Act of 1964, and the initiation of several social programs aimed at increasing minority-group enrollment. But since the mid-1970's, it said, few gains have been made.

The report noted, for example, that:

▶ The proportion of blacks aged 25 to 29 who had completed four or more years of college increased from 10 per cent in 1970 to 15 per cent in 1975. But from 1976

Continued on Page 10, Column 3

Bar Association Reaffirms Decision to Approve Some Schools Despite Religious Discrimination

By ROBERT L. JACOBSON

CHICAGO

A five-month-old decision by the American Bar Association that allows it to accredit certain church-related law schools even if they discriminate on religious grounds survived a concerted drive for rescission last week by many of the organization's members.

Critics had contended that the new policy, which was adopted by the A.B.A.'s House of Delegates last August by a vote of 147 to 127, was constitutionally vulnerable and morally wrong. But after a two-hour debate at the association's midyear meeting here, the delegates sustained the action by a larger margin than before, 176 to 138.

Speakers on both sides of the issue acknowledged, as they had in August, that the constitutional questions involved were not easily settled, in part because they pitted individual rights to religious freedom against claims that church-related institutions were similarly protected under the First Amendment.

'State Action' an Issue

Another point of contention was whether A.B.A. accreditation, on which most states rely as a basis for allowing law-school graduates to take bar examinations, could properly be considered "state action" and thus be subject to judicial scrutiny.

The association had taken the position in legal proceedings that its accrediting operations were voluntary and did not impose any obligations on the states.

Nevertheless, in defeating the move for rescission, most delegates here evidently agreed with arguments that the main purpose of A.B.A. accreditation is to assure the academic quality of law schools, and that—as one defender of the new policy put it—"there ought to be some room for religiously oriented schools" so long as

Continued on Page 9, Column 1

$287,000 for a Coach Stirs Worry of 'Ripple Effect'

Reports that the new football coach at Texas A&M University will earn $287,000 a year have caused some college athletic officials to fear a possible "ripple effect" on the salaries of other top coaches.

Jackie Sherrill's six-year, $1,722,000 contract as coach and athletic director at Texas A&M is believed to be the largest in the history of college sports. Mr. Sherrill took the job last month after compiling a record of 50 wins, 9 losses, and 1 tie in five years as head football coach at the University of Pittsburgh.

Boosters' Influence Feared

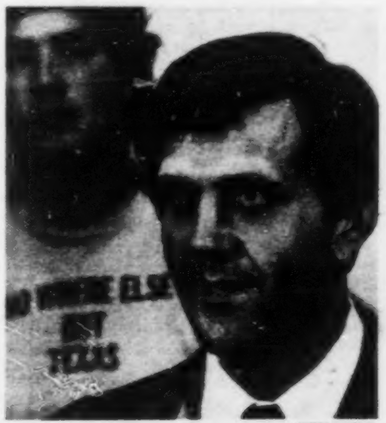
Several athletic officials at other institutions around the country are concerned that Mr. Sherrill's contract, which was offered to him by Texas A&M's board of regents and will be financed by the university's alumni and other private boosters, is a sign of increasing influence from outside interests on big-time sports programs.

"It scares the hell out of me, to tell you the truth," said Donald B. Canham, director of athletics at the University of Michigan at Ann Arbor. "I'm fearful that more and more industrial types and other wealthy people are trying use their money to control a college football team or a basketball team as if it were a professional franchise."

Mr. Canham, who said he was worried about "the potential for cheating and abuses" under such circumstances, added that rich fans who want to be known as the benefactors of a top-ranked college team "can make it so attractive that even a high-principled guy could be tempted to do anything to be in the top 10 every year."

Such concerns did not begin with the

Continued on Page 9, Column 1



WIDE WORLD

Jackie Sherrill announces he will resign as Pittsburgh's football coach, as quarterback Dan Marino listens.

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For further information write: Summer Institute, Bryn Mawr College, Bryn Mawr, Pennsylvania 19010. 215/645-5173.

RESEARCH FELLOWSHIPS

The Institute for Afro-American and African Studies at the University of Virginia is now accepting applications for research fellowships with tenures to begin in the fall of 1982. Fellowships are available with stipends for post-doctoral fellowships in the $20,000 range for one year, and for pre-doctoral dissertation fellowships at $10,000 per year for two years. All fellowships are for the completion of research already in progress on Africa, Africans, and peoples of African descent in the humanities and social sciences. The application deadline is March 15, 1982.

Guidelines may be obtained by writing to:

William E. Jackson
Associate Director for Research
Institute for Afro-American and
African Studies
B025 Garrett Hall
University of Virginia
Charlottesville, Virginia 22903

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Text of the Recommendations of the Ford Foundation's Panel

WASHINGTON

Following are the recommendations of the Ford Foundation's Commission on the Higher Education of Minorities:

Implementation of the Value-Added Model

The commission recommends:

▶ That educational institutions revise their testing and grading procedures to reflect and enhance the value-added mission. Such a revision requires, first, that current normative or relativistic measures be replaced by measures that assess the learning and growth of the individual student and, second, that these measures be administered periodically to assess the individual's growth over time. Results from both local and national tests should be routinely fed back to individual students and teachers on an item-by-item basis. Such revised testing and grading procedures will better serve the educational process by providing students, teachers, institutions, and policy makers with feedback on the nature and extent of student learning and growth over time. This feedback will be useful not only in evaluating the effectiveness of educational programs but also in diagnosing the educational progress and needs of individual students.

▶ That educational institutions use standardized tests for course placement, evaluation, and counseling rather than just for the selection and screening of students.

▶ That educational institutions enlarge their concept of competency measures to include the assessment of growth in the noncognitive realm: personal development, interpersonal skills, and self-esteem.

RATIONALE. The principal function of all educational institutions should be to change people: to increase the competence of students, to enhance their personal development, and to help them lead more productive and fulfilling lives.

Ideally, testing and grading procedures should be designed to facilitate this value-added mission of institutions.

Typically, testing and grading procedures in higher education are used not to measure student growth or change but to rank students in relation to each other. Because current practices emphasize the screening and certification of students, tests and grades not only fail to contribute to the learning process, but also pose special obstacles to the development of minority students.

Precollegiate Education

The commission recommends:

▶ That school counselors and teachers make special efforts to assist minority students in understanding the relationship between their education and their future careers and other life options.

▶ That secondary school counselors and teachers encourage minority students to enroll in college preparatory curricula and to take courses in mathematics, languages, natural science, and social science.

▶ That schools routinely test new and continuing students, as a basis for undertaking any remedial efforts that may be required to correct for the effects of earlier educational deficiencies.

▶ That secondary school teachers and administrators, working in close collaboration with faculty from nearby colleges and universities, define those intellectual competencies that are crucial to effective performance in college and develop tests to measure such competencies.

▶ That such tests be administered on a repeated before-and-after basis to assess student progress and program effectiveness, in accordance with the value-added model.

▶ That the results of such periodic testing and retesting be a major element in the accountability of school teachers and administrators, and that those who are demonstrably effective in assisting minority students should be more adequately compensated.

▶ That the school leadership make greater efforts to ascertain and respond to the concerns of minority parents, to involve them in the operation of the schools, and to assist them in understanding the objectives, procedures, and practices of the schools.

▶ That the per-student formula now used to allocate resources among public elementary and secondary schools within a school district be revised so that predominantly minority schools receive a greater share of these resources, some of which should be used to develop rigorous academic programs and associated support services for their students.

▶ That higher education institutions, schools, and departments concerned with the training of elementary and secondary school teachers develop stronger academic programs designed, among other things, to increase the prospective teacher's awareness of and sensitivity to minority cultures and values.

. . .

Community Colleges

The commission recommends:

▶ That community colleges revitalize their transfer function by establishing as one option a "transfer-college-within-a-college," wherein all students aspiring to a baccalaureate can be brought together and exposed to the same kinds of intensive educational and extracurricular experiences commonly available to students at residential institutions. Funding formulas may have to be revised to strengthen the "college-within-a-college."

▶ That the transfer program staffs of community colleges work closely with their counterparts at senior institutions to improve articulation.

▶ That transfer programs within community colleges offer intensive remediation and academic counseling.

▶ That senior institutions make more effort to facilitate the transfer of community college graduates by setting aside an appropriate amount of financial aid for these students and by offering orientation and counseling to meet their special needs.

▶ That in areas where senior institutions and community colleges are located close to one another, young people aspiring to a baccalaureate be encouraged to enroll in the senior institution, without prejudice to the continuing opportunity of students in two-year colleges who may wish to transfer to the senior institution.

RATIONALE. Because they are geographically accessible, relatively inexpensive, and flexible in admissions policies and scheduling, community colleges have opened postsecondary access to many people who otherwise might not have gone beyond high school. Community colleges have succeeded in providing vocational training and adult education for many

Minority-Group Students

Continued from Page 1

to 1979 the proportion minority-group graduates increased only slightly.

▶ From 1973 to 1977 the share of doctorates awarded to members of all four groups increased from 3.8 per cent to 6.3 per cent. Since 1977, the percentage has declined slightly.

▶ The proportion of minority-group students enrolled in medical school more than tripled—from 3 per cent in the late 1960's to 10 per cent in the 1974-75 academic year. It has since "stabilized" at 9 per cent.

▶ Minority enrollment in law schools increased from 3.8 per cent in the late 1960's to 6.4 per cent in academic 1976-77, but there has been almost no change since then.

The most important factor contributing to the "severe underrepresentation" of the four groups at all levels of higher education, the report said, "is their extremely high rate of attrition from secondary school." A higher-than-average dropout rate at undergraduate colleges was cited as the second most important factor.

Finding that most such students were concentrated in "less selective" institutions, the commission called on selective institutions to recruit more minority-group students.

It also criticized the traditional use of high-school grades and standardized-test scores to predict a student's performance in college.

"While this predictive model may be appropriate for businesses, it is inappropriate for public higher education, where institutions exist for the benefit of students," the report said.

It added that "test scores add little beyond high-school grades in predicting the academic performance and persistence of minority students during the undergraduate years."

Members of the commission predicted at a press conference last week that the value-added approach recommended to higher education would lead to increased minority-group enrollment and a higher rate of graduation among those admitted.

Borrowing from the concept of value-added taxes, they proposed that colleges and universities add to the level of education of students in increments, using a series of "diagnostic" tests and individualized instruction.

The idea is akin to the so-called competency-based programs adopted in recent years by some elementary- and secondary-school systems. None of the commissioners knew of any higher-education institutions currently using such an approach.

O. Meredith Wilson, who chaired the commission, said at the press conference that the recommendation was "an effort to press the academic community to measure themselves by their effect upon their clientele, and to draw their satisfactions from the growth of the students," rather than from the standing of their institutions.

The panel also recommended:

▶ That community colleges, which enroll a large proportion of minority-group students, work with four-year colleges to increase the number of students who transfer into baccalaureate programs.

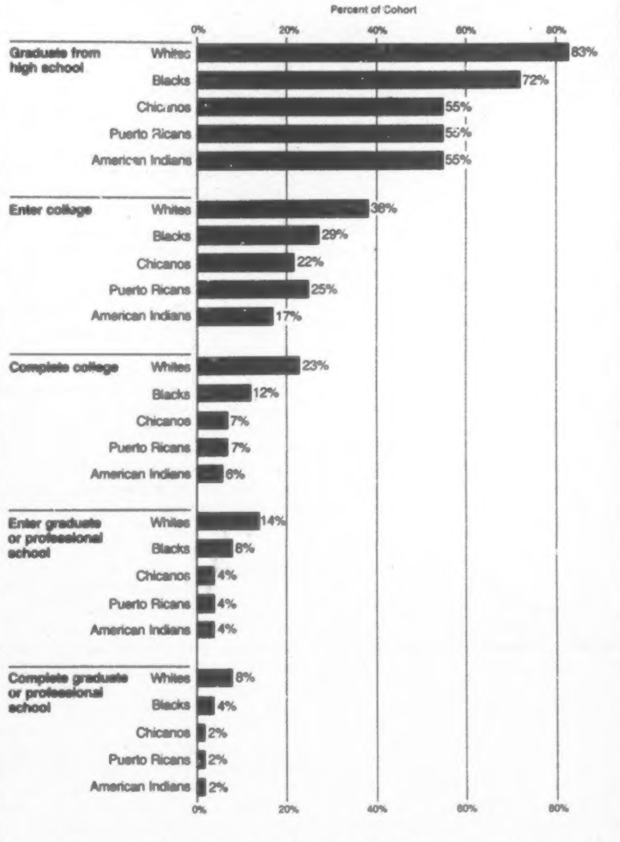
▶ That secondary schools make a stronger effort to encourage members of minority groups to enroll in college-preparatory courses.

▶ That colleges and universities improve their tutoring services, basic-skills courses, and academic counseling for minority-group students.

▶ That students in need of financial assistance be given grants rather than loans, and that work-study programs be arranged so that students are not required to work more than half time.

The report is part of a larger study, *Minorities in American Higher Education*, by Alexander W. Astin, to be published by Jossey-Bass in May.

The Education Pipeline for Minority-Group Students



Note: Percentages are of the number of students entering high school in each group.

SOURCE: THE FORD FOUNDATION

Americans. The relatively recent American Indian community college movement demonstrates how effective these institutions can be in responding to the immediate needs of that community by offering career associate-degree programs in such areas as range management, animal husbandry, and practical nursing.

Community colleges have been less successful, however, in performing their transfer function. Our data indicate that whereas three in four community college freshmen intend to get the baccalaureate, only one in four actually does so. What makes the attrition problem especially severe is the heavy concentration of minority students in community colleges, particularly in states like California and Texas that have hierarchical, three-tier system of public higher education. Because many minority students do not meet the admissions requirements of four-year institutions, they are forced to enroll in community colleges.

For some of these students, the community college's open door leads to a dead end. Moreover, many of those community college entrants who succeed in transferring to a senior institution find themselves as students with advanced standing but without the resources and services that are ordinarily available to entering freshmen—for example, financial aid and orientation.

Academic and Personal Support Services

The commission recommends:

▶ That colleges and universities strengthen their efforts to help underprepared minority students improve their study habits and develop their basic skills, by offering tutoring, developmental courses, and academic counseling.

Such efforts will not only benefit the individual student but will also help institutions financially by reducing student attrition rates.

▶ That colleges and universities provide resources to establish centers where minority students can meet together for social and educational exchanges. Such centers can promote a sense of community, can help new students learn about the system, and can foster cultural identity, pride, and strength in such a way that minority students will be able to challenge as well as to enrich and broaden the traditional values of the institution.

▶ That minority students themselves, as well as local minority communities, be used as a resource in providing leadership and initiatives for the organization of such academic and personal support services, and that they be given a responsible role in decisions concerning the operation and management of minority services.

▶ That the trustees, administrators, and faculties of colleges and universities give strong and visible support for the development of ethnic studies programs, so that the perspectives added by such programs will be available for the benefit of all students, minority and majority.

. . .

The Myth of Equal Access

The commission recommends:

▶ That educational policy makers and planners revise their traditional concept of equality of access to take into account the type, quality, and resources of the institution entered.

▶ That the more selective institutions—including the "flagship" (major) universities in each state—review their recruitment and admissions procedures and where necessary revise them to attract and admit more minority students.

▶ That these selective institutions make clear their commitment to the goal of increasing minority enrollments by providing support services, presenting minority perspectives in the curriculum, and hiring, promoting, and tenuring more minority faculty and administrators.

▶ That institutions re-examine the educational rationale underlying traditional selective admissions practices. Ideally, the predictive model of admissions should be replaced with a

Continued on Following Page

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Panel's Recommendations

Continued from Preceding Page

model that focuses on the institution's value-added mission.

▶ That those institutions using the predictive model of admissions examine the validity of their formulas separately for minorities, with special attention to the possibility that standardized test scores, which pose a far greater handicap to minorities than high school grades, add little to the prediction of college performance.

RATIONALE. Aggregate statistics on college enrollments mask the fact that minority students are overrepresented in the less selective institutions and underrepresented in the more selective schools—especially the major public universities of most states. Given that the more selective public and private institutions tend to have greater financial resources, more residential facilities, larger libraries, better physical plants, more varied curricula, and more highly trained faculty, it follows that those students who must attend the less selective institutions are denied equal educational opportunities.

Selective admissions based on high school grades and standardized test scores have been justified on the grounds that grades and tests predict college performance. While this predictive model may be appropriate for businesses, it is inappropriate for public higher education, where institutions exist for the benefit of students. Furthermore, the results of our longitudinal analyses show that test scores add little beyond high school grades in predicting the academic performance and persistence of minority students during the undergraduate years.

Financial Aid

The commission recommends:

▶ That whenever possible students with significant financial need be given aid in the form of grants rather than loans.

▶ That students be given enough aid so that they do not need to work more than half time.

▶ That if students are given financial aid in the form of work-study support, it be packaged in such a way that they work less than half time and, whenever possible, at on-campus jobs.

▶ That federal and state legislators and policy makers support expended grant and work-study programs.

RATIONALE. Minority students often start college with heavy financial responsibilities. For example, two-fifths of minority freshmen entering college in the mid-1970's said they had major expenses and debts; close to a third of the Chicano and Puerto Rican freshmen contributed to the support of their parents; and 16 per cent of blacks and Chicanos, as well as 10 per cent of Puerto Ricans, were single parents or heads of households. Even though large proportions of these freshmen (90 per cent of the blacks, 83 per cent of the Chicanos, 84 per cent of the Puerto Ricans, and 59 per cent of the American Indians) received financial aid, many of them still had to work at outside jobs. Half the American Indians, a third of the Chicanos and Puerto Ricans, and a fifth of the blacks worked more than half time while in school. The implication of these two sets of figures is that minority freshmen who do not get financial aid must find outside jobs. Research evidence indicates that working more than half time has a negative effect on persistence, whereas working less than half time, particularly at an on-campus job, has a positive effect.

Our analyses further indicate that receiving a grant not only contributes to the student's persistence but also gives the student a wider range of institutional options. Finally, the findings with respect to the effects of loans were inconsistent, perhaps because loan programs for college students have changed drastically since the early 1970's.

Bilingualism

The commission recommends:

▶ That federal and state policy makers examine the goals and outcomes associated with current bilingual education policy and practice, recognizing that no child should be forced to choose between educational opportunity and cultural identity.

▶ That along with pedagogical considerations, the historical and juridical facts supporting group claims to language rights and cultural continuity should be kept clearly in view. The right of minorities to establish language and cultural objectives for themselves should be recognized in public policy, and processes should be fostered through which informed and responsible decisions about language and education can be made by the communities concerned.

▶ That colleges and universities more actively promote the broad-gauged, interdisciplinary, and historically grounded research necessary to inform a more rational, efficacious, and humane national policy concerning language and education.

▶ That elementary and secondary schools provide the instructional services and resources necessary to maintain and develop the language skills of children who enter school speaking Spanish or an Indian language, if these students or their parents request such services. This recommendation in no way relieves the schools of their responsibility for providing these students with a complete training in English.

▶ That researchers seek to identify the instructional methods, materials, and programs at both the precollegiate and postsecondary levels that contribute to student performance in school and promote the development of bilingual skills.

▶ That researchers seek to identify the barriers faced by college students whose command of English is limited as a result of poor instruction in the elementary and secondary schools or of recent migration to this country and to explore ways in which the educational achievement of these students can be facilitated. (The lack of research related to the needs and experiences of bilingual college students frustrated the commission's efforts to understand the dynamics of bilingualism at the postsecondary level.)

▶ That postsecondary educators recognize their responsibility for and commit themselves to furthering the development of bilingual skills among college students and, through their roles as teacher trainers, support and improve the job training of teachers already working at the elementary and secondary levels.

▶ That colleges and universities acknowledge and utilize the linguistic talents of bilingual students by providing them with the training and opportunities to work part time on community liaison and on student recruitment and orientation programs; by employing upper-division or graduate students to provide academic tutoring and personal counseling for new bilingual students who need such services; and by hiring and training students as tutors and teaching assistants in foreign language courses and as research assistants on projects concerned with studying language-related issues or with collecting data within bilingual communities. These kinds of opportunities benefit students as well as the institution by enhancing student involvement in the college experience and by providing on-campus employment that is likely to be of greater interest and value than many other work-study jobs.

. . .

Graduate and Professional Education

The commission recommends:

▶ That federal, state, and institutional policy makers increase financial aid for minority students at the graduate and professional levels. In particular, every effort should be made to expand the number of assistantships available to minority graduate students, since this form of aid seems to intensify student involvement in graduate study, promote professional development, and strengthen the bond between student and faculty mentor.

▶ That federal, state, and private agencies consider implementing challenge grant programs, since such programs seem likely to increase the amount of financial aid available for minority graduate students as well as to strengthen institutional commitment to the goal of increasing minority enrollments.

▶ That graduate faculties be more sensitive and responsive to the need of minority graduate students to have more freedom and support in selecting research topics, choosing methodologies, analyzing data, and interpreting results, consistent with graduate standards.

▶ That graduate and professional schools make special efforts to increase their pools of minority graduate students and the presence of minority members on their faculties.

▶ That federal and state policy makers give increased attention to the nation's long-term needs for highly skilled academic, research, and technical workers. We believe that recent cuts in funding for advanced training programs based on actual or presumed short-term surpluses of personnel in certain fields are shortsighted, and that they disproportionately and unfairly reduce the opportunities of emerging minority scholars to contribute to the general good.

RATIONALE. Advanced education is an important route to positions of leadership in U.S. society. Despite some gains in the past decade, minority enrollments in graduate and professional schools remain low, lagging behind minority undergraduate enrollments and falling far short of white enrollments at the graduate and professional levels.

Data from the current project contribute to our understanding of the problems confronting minority students who pursue advanced degrees. Five factors were found to affect minority access to, participation in, and satisfaction with graduate and professional education.

First, financial aid is terribly important to minority graduate students and has become a critical issue because of declines in federal and private financial support in recent years. Our analyses revealed that financial aid facilitates entry to and persistence in graduate school. Respondents to the commission's survey of minority educators identified financial concerns as a major obstacle to graduate school attendance. A large proportion of the Ford Fellows said that receiving the fellowship award enabled them to attend the graduate schools of their choice and to stay in school once they had enrolled. The 1980 follow-up of 1971 freshmen indicated that minority respondents who had attended graduate school were far less satisfied with the financial aid cousneling they had received than were their white counterparts.

Almost as important as the availability of financial aid was its form. Teaching, administrative, and research assistantships that promote professional development are preferable to loans, which do little to encourage students to participate in the apprenticeship that is such an impor-

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tant aspect of the graduate experience.

A second important factor is the type of undergraduate institution attended. Analyses of the 1971-1980 data indicated that the minority student who completes the baccalaureate at a high-quality (that is, selective, prestigious, affluent) college has a much better chance of enrolling in and completing graduate and professional study than the minority student who attends a low-quality college.

Third, the environment of the graduate institution has a major impact on the minority student's participation in and satisfaction with graduate education. Survey respondents indicated that they were often uncomfortable with the cool, somewhat alien, environments of academic departments and research universities. Low minority enrollments and lack of institutional concern for minority students contributed to their sense of isolation and impeded their adjustment. A number of Ford Fellows commented that the inhospitable atmosphere of academic institutions, along with the prospect of taking a low-paying faculty position, contributed to their decision to seek employment in the private sector rather than in academe following degree completion.

Fourth, faculty expectations and attitudes constitute a significant part of the graduate and professional experience of minority students. A large proportion of the Ford Fellows and of the minority educators said that they entered graduate programs feeling stigmatized by their race and ethnicity; minority respondents felt that faculty members all too often assumed that they had been admitted to satisfy affirmative action requirements and that they were less competent than white graduate students. The continual need to prove themselves angered them and contributed to their dissatisfaction with graduate study.

Finally, survey respondents and Ford Fellows reported that majority faculty often failed to acknowledge, let alone support, minority-oriented research interests and associated cultural values. As graduate students they faced constraints in their choices of research subjects and approaches and in drawing implications from their studies, because of negative attitudes, very specialized concerns, and methodological rigidity on the part of faculty. These sources of conflict contributed to the sense of alienation pervading these accounts of the graduate experience.

Minority Faculty and Administrators

The commission recommends:

▶ That colleges and universities seek to recruit and hire more minority faculty members, administrators, and student services personnel and make every effort to promote and tenure minority educators. Actions do indeed speak louder than words: no amount of rhetorical commitment to the principles of equal opportunity, affirmative action, and pluralism can compensate for or justify the current degree of minority underrepresentation among faculty, administrators, staff members, and students in higher education.

▶ That top administrators demonstrate their clear and unequivocal support of efforts to recruit, hire, promote, and tenure minorities. In many respects, the administration establishes the campus atmosphere or "tone." Thus, a visible personal commitment to change on the part of one or two senior officials can be critical in effecting increased minority representation on a campus.

▶ That colleges and universities make every effort to ensure that minority faculty members, administrators, and student personnel workers are represented in all types of positions at all levels within the institution. An unfortunate side effect of the effort to provide better services to minority students has been the creation of positions that are perceived and labeled as "minority" positions; often, minority staff are hired for part-time, short-term, nontenure-track jobs that are supported by "soft" funds from outside the institution's line-item budget. Because they are isolated from the institutional mainstream, the incumbents of such jobs have little opportunity to influence institutional policies and practices, limited interaction with majority students, and few prospects for advancement.

▶ That colleges and universities revise their hiring and promotion criteria so as to recognize and reward a wider variety of accomplishments and types of service. Although we are certainly not the first to advocate change in the current review and promotion system, continued adherence to narrowly defined criteria tends to penalize minority staff members who, in trying to fulfill the multiple roles demanded of them, often have little time or energy left to devote to scholarly research and other traditional functions. Institutions that emphasize scholarly activity as a major criterion for promotion should consider establishing a junior faculty research leave program for those young faculty members who have taken on special advising and counseling duties.

▶ That state legislatures and state boards support administrative internship programs (such as the current state-funded program in the University of California and California State University and College systems) to develop and promote minority and women administrators in public colleges and universities.

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Government Programs

The commission recommends:

▶ That the federal government continue to play its leadership role in emphasizing access to higher education for all segments of society. In particular, federal programs in the areas of student aid, institutional support, and special interventions deserve continued support.

▶ That state and local policy makers, planners, and educators devote more attention to the factors that impede full minority participation in higher education. Federal funding should supplement, not supplant, state and local efforts to support a range of programs and interventions responsive to the needs of minority students.

RATIONALE. During the past 15 years, the federal government has assumed major responsibility for the educational equity issues often overlooked by state and local governments. Evidence indicates that federal leadership in this area has contributed to increased minority participation in higher education, and that federal categorical programs—financial aid, institutional aid, and special interventions—have helped to move the higher education system somewhat closer to the goal of equal access. The success of federal efforts often depends upon the willingness of state and local officials to administer and implement federally funded programs. Unfortunately, state and local performance has not always been consistent with federal priorities, and this discrepancy has had important consequences for minority groups. Local, state, and federal governments have a collective and equal responsibility for minority participation in higher education—a responsibility that does not diminish during times of fiscal stringency.

Minority Women

The commission recommends:

▶ That colleges and universities provide counseling services and personal support groups to assist minority women in overcoming the barriers that result from double standards and sex-role stereotypes.

▶ That colleges and universities

Continued on Following Page

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Ford Panel

Continued from Preceding Page

provide science and mathematics clinics and special courses to help minority women make up for deficiencies in preparation in these subjects, so that these women will be able to consider a wider range of careers. These efforts should be additional to particular interventions at the precollege level.

▶ That institutions hire and promote more minority women as faculty, administrators, and staff.

▶ That institutions provide child care services on campus.

▶ That institutions make an effort to involve those minority women who live at home more fully in campus life—for example, by providing dormitory space or other facilities where these women can spend time interacting with other students.

RATIONALE. Sex differences in the choice of major field and in career aspirations transcend racial and ethnic differences, but in some instances, are more pronounced among minorities than among whites. At all degree levels, women are more likely to major in allied health fields, the arts and humanities, and education, whereas men are more likely to major in business, engineering, the physical sciences, and mathematics. Further, although women tend to make better high school grades than men do, more female than male freshmen—and especially minority female freshmen—express a need for special remedial assistance in science and mathematics. Data on earned degrees indicate that minority women are even more poorly represented than white women among those receiving degrees in engineering, physical sciences, and mathematics.

Minority women are heavily concentrated in the field of education. In 1975-76, 8 per cent of white women receiving baccalaureates were education majors, in contrast to 24 per cent of Hispanic women, 31 per cent of black women, and 32 per cent of American Indian women. At the master's level in 1978-79, half of the white women (52 per cent) and the Hispanic women (53 per cent), 57 per cent of the Indian women, and 66 per cent of the black women received their degrees in education. At the doctorate level, about a third of the white and Hispanic women, half of the Indian women, and two-fifths of the black women earned their degrees in education. Clearly, if minority women are to have access to a wider range of positions and occupations, their current patterns with respect to undergraduate majors must change.

Finally, responses to the survey of minority educators indicate that minority women suffer from sex-role stereotypes and conflicts engendered by multiple-role demands.

Data Pertaining to Minorities

The commission recommends:

▶ That all federal, state, and other agencies concerned with collecting and reporting data on minorities replace the "Hispanic" category with specific categories that separately identify Chicanos, Puerto Ricans, and other Hispanic groups.

▶ That, wherever possible, data on Puerto Ricans residing in the United States be reported independently of data on those whose homes are in Puerto Rico.

▶ That since the designation "American Indian" is ambiguous, and since survey respondents who identify themselves in this way frequently change their response on subsequent surveys, persons who indicate that they are American Indians be asked for further specific information—that is, to specify their tribe or band.

▶ That all sample surveys strive to oversample minorities, especially the smaller groups—for example, Chicanos, Puerto Ricans, and American Indians.

▶ That the U.S. Bureau of the Census hire and train more minority census takers and researchers to develop and administer questionnaires and to analyze and interpret the results of Census Bureau surveys.

▶ That the officials responsible for public higher education in each state institute a comprehensive data system for tracking and monitoring the flows of minority and nonminority students through the community colleges, baccalaureate-granting institutions, and graduate institutions in the state.

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Evaluation of Minority-Oriented Programs

The commission recommends:

▶ That public and private agencies funding minority-oriented programs require that all proposals for such projects include an evaluation component, and that they earmark a certain fraction of the project funds for such evaluation.

▶ That funding agencies view the results of evaluation studies as a means of improving and strengthening programs, and that they communicate this view to those involved in operating the programs.

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Further Research on Minorities

The commission recommends:

▶ That officials in private and state agencies, as well as in the federal government, give priority to minority-oriented research in allocating their increasingly limited funds. These funding sources should aim to establish a process whereby a broad-based and sustained consultation about information needs and issues in higher education can take place within minority communities. Scholars from these communities should have a leading role in efforts to combine imaginatively the talents and energies present within these communities for the purposes of generating research agenda and priorities, carrying out research, and implementing the action implications flowing from these studies.

▶ That the following specific topics be given much more thorough study:

A. factors affecting attrition from secondary school;

B. the quality of education received in secondary schools with predominantly minority enrollments;

C. the effectiveness of programs for improving articulation between secondary schools and higher education institutions;

D. factors affecting minority students' decisions to pursue careers in natural sciences and engineering;

E. factors affecting minority access to the more prestigious institutions;

F. factors affecting minority attrition from undergraduate study;

G. the impact of alternative financial aid programs on the achievement and persistence of minority students;

H. factors affecting the success of community college students who aspire to the baccalaureate;

I. the importance of sex differences within minority groups;

J. ways to develop the talents and skills of adults living in minority communities who have not had prior access to educational opportunities.

▶ That public and private funding agencies give serious consideration to providing relatively long-term support for programmatic research on minorities. Given the importance of longitudinal research in furthering our understanding of issues related to the higher education of minorities, what is specifically needed is a periodic longitudinal study that will make it possible to monitor the flows of minorities through the educational system and into the workforce, to evaluate the impact of special minority-oriented programs, and to identify educational policies or practices that facilitate or inhibit minority progress through the system. Such a study should begin during the secondary school years (or at the latest by college entry) and should be replicated on a regular basis at least every four years.

RATIONALE. These recommendations are based on the commission's understanding of prior research efforts as well as on its direct experience in conducting research for this project. They are meant to complement the recommendations regarding data and evaluation. Given the current efforts to reduce federal support for research in education and in the social and behavioral sciences, pressures for funding further research on minority education will fall heavily on private and state agencies.

List of Members, Ford Commission

NEW YORK

Following are the members of the Ford Foundation's Commission on the Higher Education of Minorities:

O. Meredith Wilson, president and director emeritus, Center for Advanced Study in the Behavioral Sciences, *chairman.*

Alexander W. Astin, president of the Higher Education Research Institute and professor of higher education, University of California at Los Angeles.

Frank Bonilla, professor of sociology and director of the Center for Puerto Rican Studies at the City University of New York.

Cecilia Preciado Burciaga, assistant provost, Stanford University.

Yvonne Brathwaite Burke, lawyer and former member of the U.S. House of Representatives.

Albert H. Hastorf, professor of psychology and human biology, Stanford University.

Calvin B. T. Lee, vice-president, educational planning, Prudential Insurance Company of America.

Alfonso A. Ortiz, professor of anthropology, University of New Mexico, and president, American Association of Indian Affairs.

Stephen J. Wright, former president of Bluefield State College.

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FACT-FILE

Women and Minority-Group Members in Administrative Posts

The number of top-level jobs held in 1978-79 and the change since 1975-76

Position	Public Institutions*								Private Institutions*							
	White men	3-year change	White women	3-year change	Minority men	3-year change	Minority women	3-year change	White men	3-year change	White women	3-year change	Minority men	3-year change	Minority women	3-year change
Chief executive officer	339	+ 5	3	- 2	8	+2	0	—	195	+17	9	+ 2	0	- 1	0	—
Chief academic officer	236	+25	12	- 5	8	+3	1	—	135	+ 9	16	+11	1	+ 1	0	—
Chief budget officer	89	+ 9	6	- 1	3	+2	0	—	28	+ 6	1	- 2	0	—	0	—
Chief business officer	253	+15	4	+ 3	5	-1	0	—	148	+ 5	9	+ 2	0	- 1	0	—
Chief planning officer	65	- 2	4	+ 3	3	+2	2	+ 2	27	+ 6	6	+ 5	1	+ 1	0	—
Chief student-affairs officer	216	+30	25	+ 9	15	-1	2	+ 1	134	+29	4	- 9	23	+19	0	-2
Comptroller	141	+ 9	10	+ 2	5	+1	2	+ 1	92	- 6	14	+ 2	4	+ 3	0	-1
Manager, bookstore	123	+21	56	+ 2	7	+3	0	—	67	+ 6	56	+24	4	+ 4	0	—
Purchasing agent	159	+23	25	+ 7	5	+1	1	—	59	+12	13	+ 6	2	—	0	—
Director, affirmative action and equal employment	21	+ 6	45	+17	34	+7	26	+13	5	—	9	+ 5	6	—	2	—
Director, athletics	185	+43	2	+ 1	5	+3	0	—	117	+32	3	+ 1	1	- 2	0	—
Director, community services	71	-23	13	+ 6	6	+1	1	- 1	10	- 4	4	+ 3	3	+ 2	0	-1
Director, computer center	190	+24	4	+ 3	7	+5	0	—	90	+13	8	+ 5	4	+ 4	0	—
Director, food service	80	+14	17	- 4	4	+2	1	—	38	- 3	9	- 3	2	+ 1	2	—
Director, information office	93	- 7	42	+ 8	2	+1	0	—	46	+ 4	23	+ 1	0	—	0	—
Director, information systems	50	+ 1	5	+ 5	2	+2	0	- 1	20	+ 1	5	+ 2	0	—	0	—
Director, institutional research	113	+19	22	+ 7	4	-1	2	+ 1	35	+10	9	+ 5	1	+ 1	0	—
Director, legal services	37	+ 5	4	+ 2	1	+1	0	- 1	6	+ 1	1	—	0	—	1	+1
Director, library services	191	+ 9	50	-10	6	+2	2	- 3	99	- 2	56	+ 6	4	+ 2	3	+3
Director, personnel/human resources	113	- 6	36	+ 8	11	—	0	—	38	- 7	25	+ 3	0	- 2	2	-1
Director, student counseling	151	+23	44	+17	10	+9	3	—	60	+ 5	36	+23	4	+ 2	1	+1
Director, student housing	107	+10	19	+ 2	6	+3	0	- 1	68	+16	41	-18	0	- 3	2	+2
Director, student placement	138	+ 6	27	+ 7	9	+4	5	+ 3	62	+11	51	+23	3	+ 1	2	—
Director, student union	133	+17	18	+ 5	11	+8	1	—	44	+ 6	18	+ 6	1	+ 1	1	-1
Dean, agriculture	43	+ 3	0	—	1	+1	0	—	1	—	0	—	0	—	0	—
Dean, architecture	27	- 1	0	—	0	—	0	—	4	- 2	0	—	0	—	0	—
Dean, business	144	+30	8	+ 6	1	-1	2	+ 1	50	+ 7	2	+ 1	2	—	0	—
Dean, dentistry	15	+ 1	0	—	0	—	0	—	6	—	0	—	0	—	0	—
Dean, education	113	+15	6	+ 3	6	-4	0	- 1	33	- 2	5	—	0	—	0	—
Dean, engineering	82	+19	0	- 1	2	+1	0	- 1	25	+ 1	0	—	0	—	0	—
Dean, fine arts	40	- 5	3	- 3	4	+2	0	—	17	- 1	1	- 2	0	—	0	—
Dean, graduate programs	95	+10	10	+ 4	5	+2	1	+ 1	41	+13	3	- 2	1	—	0	—
Dean, home economics	8	+ 1	24	-11	0	-1	0	—	1	—	5	+ 2	0	—	0	—
Dean, law	32	+ 3	0	—	0	—	0	—	22	+ 3	0	—	2	+ 1	0	—
Dean, medicine	26	—	0	—	0	—	0	—	6	+ 1	0	—	0	—	0	—
Dean, music	22	- 9	3	+ 3	1	+1	0	—	16	- 5	0	—	0	—	0	—
Dean, nursing	3	- 5	70	+10	0	—	3	—	0	—	23	+ 2	0	—	0	—
Dean, pharmacy	23	+ 5	0	—	0	—	0	—	5	+ 1	0	—	0	—	0	—
Dean, social work	19	- 8	6	+ 1	3	+ 1	1	+ 1	5	- 6	1	- 1	2	+ 2	0	—
Dean, vocational education	69	+17	0	- 1	2	—	0	—	1	- 1	0	—	0	—	0	—
Total	**4,126**	**+352**	**636**	**+103**	**208**	**+61**	**57**	**+15**	**1,856**	**+176**	**466**	**+103**	**71**	**+36**	**16**	**+1**

* Does not include predominantly black or single-sex institutions.
— No change.

SOURCE: COLLEGE AND UNIVERSITY PERSONNEL ASSOCIATION

Despite Gains, Women, Minority-Group Members Lag in College Jobs

WASHINGTON

The number of women and minority-group members in administrative jobs at colleges and universities has increased in recent years, but white men continue to outnumber them by more than three to one, according to a national study.

The study, published by the College and University Personnel Association, tested five reasons that have been offered to explain the slow progress of higher education in hiring women and minority-group members for administrative jobs.

Those reasons and the study's findings on each were:

▶ Women are paid lower salaries than men because they have not been on the job as long as men. The report said data on length of employment showed "the number of years on the job did not make a difference in the proportion of white men's salary paid to female employees."

▶ Women are paid less than men because women are more often hired from inside the institutions, thus avoiding the labor-market test of salaries that could be earned in other jobs.

The study found that women were somewhat more likely than men to be hired from within an institution, while men were more likely to be hired from outside, but a comparison of salaries indicated that those hired from outside did not necessarily command higher salaries.

▶ Financial exigency inhibits greater progress toward affirmative-action goals of equal employment and equal pay for women and minority-group members.

The study found that neither hiring trends nor salary trends appeared related to the financial condition of the institutions.

▶ Stable or declining employment in higher education precludes achieving affirmative-action goals through employment growth.

Using enrollment as an index of growth, the study found that regardless of enrollment changes, the increase in number of jobs was consistently higher for men than for women.

▶ Low turnover in a tight academic labor market provides no opportunity for hiring women or minority-group members.

The study found that positions with the highest rates of job openings did not appear to be held by increasingly large shares of women or minority-group members.

The position of academic-affairs officer, which had the highest increase in job availability during the three-year period covered by the study, 1975-76 to 1978-79, showed a decrease in the proportion of jobs held by white women, the report said. The job of chief planning officer, with the lowest increase in job availability, showed one of the largest gains in the proportion of jobs held by women.

The study, *Women and Minorities in Administration of Higher Education Institutions*, was supported by the Ford Foundation and prepared for the College and University Personnel Association by the American Council on Education.

The study used data for 1978-79 to measure the progress in employment of women and minority-group members since a similar study by C.U.P.A. and A.C.E. three years earlier.

Changes reported for the three-year period were based on data from 514 colleges and universities that participated in both the 1975-76 and 1978-79 surveys.

Women and minority-group members "were employed in a wider range of positions" at the end of the three-year period, the survey report said, but their number increased by only 3.5 percentage points to a total of 22.9 per cent of the administrative jobs.

"White women made their greatest gains at white women's colleges, minorities made their greatest gains at minority institutions," the report said.

At private institutions, according to the report, women and minority-group members held 23.7 per cent of the top-level administrative jobs in 1975-76 and increased their share to 27.9 per cent by 1978-79.

At public institutions, women and minority-group members held 16.9 per cent of the top-level administrative jobs in 1975-76 and 19.9 per cent in 1978-79.

The study found that white men held at least 94 per cent of the chief-executive jobs and about 80 per cent of the administrative-affairs and academic-affairs positions.

A fourth of the white women who were employed as top-level administrators at public, coeducational, predominantly white institutions held one of four jobs: dean of nursing, director of library services, bookstore manager, or registrar, the report said.

More than a sixth of all minority-group members in top-level administrative positions at predominantly white, coeducational institutions, public and private, held one of two jobs: affirmative-action officer or student-financial-aid officer.

The study found that salary differentials were more consistently related to sex than to race.

At predominantly white, coeducational institutions, public and private, both white women and minority-group women received salaries averaging 68 to 80 per cent of the salaries that white men holding the same jobs were paid, while minority-group men were paid about 90 per cent of the average salary of their white male counterparts.

Copies of the 1978-79 report are available at $10 each (and copies of the 1975-76 report for $5 each) from the College and University Personnel Association, 11 Dupont Circle, Washington 20036.

Boston State Merged into U. of Massachusetts System

BOSTON

Boston State College officially passed out of existence last week, when it was absorbed into the University of Massachusetts system.

The State Board of Regents of Higher Education decreed last June that Boston State and the university's Boston campus be consolidated over a three-year period, but legislative action led the board to call for immediate layoffs of close to 200 faculty members in August.

The faculty association at the college filed suit, however, and a state court ordered that the consolidation be stayed until January.

The court also said the faculty members had to be employed through June.

A mock funeral service was held at the college last week to protest its end. The Rev. Rose Ann Olmstead, a campus minister, delivered a eulogy.

Gov. Edward J. King last week recommended an increase of $37-million—about 10 per cent—for the state's higher-education system for fiscal 1983.

The governor's proposal included increases totaling about $43.2-million for the system's 27 institutions, offset by cuts of about $6-million in scholarships and other non-campus accounts.

The regents had requested an overall increase of $47-million over this year's initial appropriation of about $364.6-million. —E. PATRICK McQUAID

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FACT-FILE

Enrollment at 275 Graduate Schools

	Public Institutions		Private Institutions		All Institutions	
	Fall 1981	1-year change	Fall 1981	1-year change	Fall 1981	1-year change
Total graduate-school enrollment						
Master's-degree-only institutions	90,946	− 5.3%	15,014	− 0.6%	105,960	− 4.7%
Ph.D.-granting institutions	339,950	− 0.9%	125,272	+ 1.6%	465,222	− 0.2%
All institutions	430,896	− 1.8%	140,286	+ 1.4%	571,182	− 1.1%
First-time graduate enrollment						
Master's-degree-only institutions	20,857	− 3.9%	4,006	− 9.5%	24,863	− 4.9%
Ph.D.-granting institutions	79,929	− 1.3%	33,833	− 1.6%	113,762	− 1.4%
All institutions	100,786	− 1.9%	37,839	− 2.5%	138,625	− 2.0%
Applications received						
Master's-degree-only institutions	42,154	− 4.3%	6,339	− 2.8%	48,493	− 4.1%
Ph.D.-granting institutions	238,555	0.0%	125,813	+ 3.5%	364,368	+ 1.2%
All institutions	280,709	− 0.7%	132,152	+ 3.1%	412,861	+ 0.5%
Graduate assistants, services required						
Master's-degree-only institutions	4,822	− 1.0%	420	+ 14.8%	5,242	+ 0.1%
Ph.D.-granting institutions	66,928	+ 0.1%	20,090	+ 1.0%	87,018	+ 0.3%
All institutions	71,750	0.0%	20,510	+ 1.2%	92,260	+ 0.3%
Graduate fellows, no services required						
All institutions	10,105	− 8.8%	12,921	− 1.2%	23,026	− 4.7%
Average stipends for teaching assistants						
English departments						
Master's-degree-only institutions	$3,376	+ 5.6%	$2,796	+ 4.0%	$3,287	+ 5.4%
Ph.D.-granting institutions	4,253	+ 8.2%	4,377	+ 22.4%	4,288	+ 11.9%
All institutions	3,990	+ 7.5%	4,109	+ 19.9%	4,019	+ 10.4%
Chemistry departments						
Master's-degree-only institutions	$3,535	+ 5.5%	$2,856	+ 1.9%	$3,434	+ 5.0%
Ph.D.-granting institutions	4,807	+ 9.4%	4,700	+ 9.5%	4,775	+ 9.4%
All institutions	4,478	+ 8.6%	4,469	+ 8.8%	4,476	+ 8.6%
Degrees awarded						
Master's degrees	99,633	− 2.0%	32,898	+ 2.2%	132,531	− 1.0%
Ph.D. degrees	13,787	+ 3.4%	7,145	+ 1.0%	20,932	+ 2.6%

Note: Data are based on reports of 275 institutions, or 76 per cent of the 363 institutions that are members of the Council of Graduate Schools. Data for master's-degree-only institutions do not include master's degrees offered by institutions that also offer doctoral degrees. Data for stipends are based on first-time teaching assistants who commit 20 hours per week to assistantship duties in an English or chemistry department. Because of varying practices among institutions, the data for average stipends may be less reliable than the percentage change in average stipends.

SOURCE: COUNCIL OF GRADUATE SCHOOLS AND GRADUATE RECORD EXAMINATIONS BOARD

Graduate Rolls Off 1 Pct.; Steepest Dip in 5 Years

By JACK MAGARRELL

WASHINGTON

Graduate enrollment dropped by 1.1 per cent in the past year, according to a survey of 275 institutions by the Council of Graduate Schools in the United States and the Graduate Record Examinations Board.

It is the sharpest decline reported in five years.

Michael J. Pelczar, Jr., president of the Council of Graduate Schools, said last week that he did not interpret the data as the beginning of a downward trend.

He said he expected graduate enrollment to stabilize or increase slightly. A growing number of potential graduate students—people in mid-career seeking preparation for increasingly sophisticated work—could offset a decline in the number of students coming directly from undergraduate colleges, he said.

The annual survey, begun in 1971, showed an increase of 1 per cent in graduate enrollment last year, following three years in which the reported total had fluctuated less than half of 1 per cent.

In the fall of 1976, the annual survey found graduate enrollment down 2.3 per cent, after three years in which increases had averaged nearly 5 per cent.

Private Total Rises

The graduate schools of public universities, on the average, have 1.8 per cent fewer students this year than last. At private institutions, graduate enrollment is up 1.4 per cent.

Institutions where graduate programs do not go beyond the master's degree have lost more enrollment than those that offer doctorates.

This year's survey shows graduate enrollment down 5.3 per cent at public institutions where the master's is the highest degree offered, and down 0.6 per cent at private graduate schools offering only the master's.

Private institutions offering doctoral degrees report their enrollment is up 1.6 per cent, while public institutions offering doctoral degrees have 0.9 per cent fewer graduate students.

The graduate schools included in the survey represent 76 per cent of the 363 institutions that are members of the Council of Graduate Schools. The enrollment reported includes students registered last fall in graduate programs in business, education, engineering, social work, medicine, and other programs leading to master's or doctoral degrees.

Among students who entered graduate schools for the first time last fall, the study finds, enrollment dropped 2 per cent below the previous year's total.

Decline of 9.5 Pct.

The greatest decline reported by the survey is a 9.5-per-cent decrease in first-time graduate students at private graduate schools that do not offer degrees beyond the master's. The public "master's-only" institutions report a decline of 3.9 per cent in first-time graduate students.

Among graduate schools offering doctor's degrees, public institutions have 1.3 per cent fewer first-time students, and private institutions have 1.6 per cent fewer than they had a year ago.

The number of applications for admission to graduate schools is up 3.1 per cent at private institutions this year but down 0.7 per cent at public institutions, according to the survey.

The number of graduate assistants, whose stipends require teaching or research services, remains about the same as last year, but there has been a decline of 4.7 per cent in the number of graduate fellows, whose appointments do not require teaching or research work. Most of the falloff in the number of graduate fellows has been at public institutions, where there are nearly 9 per cent fewer than a year ago.

10 Pct. Increase in Stipends

As a measure of graduate assistants' stipends in the humanities and sciences, the survey collected data from English and chemistry departments. It found that stipends for teaching assistants had increased since last year by 10.4 per cent in English departments and by 8.6 per cent in chemistry departments.

The number of master's degrees awarded by private institutions increased by 2 per cent in the past year. But a decrease of 2-per cent in the number of master's degrees awarded by public institutions brought the total number of master's degrees to 1 per cent below the 1980 total.

The number of Ph.D.'s granted was up 3.4 per cent at public institutions, up 1 per cent at private institutions, and up 2.6 per cent over all.

The yearly changes in graduate enrollment reported in the 11 surveys by the Council of Graduate Schools and the Graduate Record Examinations Board were:

1971	+ 1.1%
1972	+ 1.9%
1973	+ 4.8%
1974	+ 4.3%
1975	+ 5.5%
1976	− 2.3%
1977	+ 0.2%
1978	− 0.4%
1979	− 0.1%
1980	+ 1.0%
1981	− 1.1%

Copies of the 1981 report are available from the Council of Graduate Schools, One Dupont Circle, Washington 20036.

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News Summary

Articles on inside pages

Nonselective colleges should reconsider requiring their applicants to submit standardized-test scores, says a National Research Council report. Story and excerpts on Page 9.

A run-off election will be held in April to decide what union will represent faculty members in the California State University system. Story on Page 8.

President Reagan has won few supporters on Capitol Hill for his bill to bar tax exemptions for racially discriminatory educational institutions. Story on Page 11.

Deep new cuts in federal support for higher education—including elimination of three student-aid programs—are proposed in President Reagan's fiscal 1983 budget. Story on Page 11.

The General Accounting Office is not sure a new GI Bill is a "cost-effective" way to attract recruits to the all-volunteer armed forces. Story on Page 16.

Three annual federal surveys that provide a "national data base" for colleges and universities may no longer be carried out by the National Center for Education Statistics. Story on Page 12.

Kentucky's plan for desegregating its public higher-education system has been accepted "provisionally" by the Education Department. Story on Page 15.

Delight, anger, and calls to lawyers were among the reactions of universities rated by *The New York Times Selective Guide to Colleges*. Story on Page 19.

Strict controls remain on academic life in Poland despite the reported reopening of most universities. Story on Page 17.

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'WORSE THAN THE GREAT DEPRESSION'

Falling State Revenues, Cuts in Payrolls Bring Hard Times to Public Institutions

By **JACK MAGARRELL**

For most states, and for the public colleges and universities that depend on state funds for the largest part of their income, hard times are here.

In 21 states, revenues this year have fallen below official forecasts. In 24, public payrolls have been cut in the past year.

In fiscal 1981, at least 19 states reduced spending to below the amounts originally appropriated.

"We face a financial problem that can still be estimated only in approximate terms," says Ohio State University's President Edward H. Jennings, "but even the estimates are twice the percentage of cutbacks we faced in the Great Depression."

Mr. Jennings invoked the specter of the 1930's in explaining to faculty members his plan for reducing spending at Ohio State by $19.6-million between now and June 30.

"In most states, budget deliberations this year will be more excruciating than usual," concluded the National Conference of State Legislatures after a nationwide survey.

Tax Collections Down

In state after state, tax collections are lower and slower than last year because of higher unemployment, lower farm prices, and general recession.

"Adjusted farm income last year was the lowest of any year since the Great Depression," said Iowa Gov. Robert D. Ray in his state-of-the-state message.

At the same time, states are receiving less money from the federal government. The National Conference of State Legislatures says cutbacks in federal aid were not the primary cause of the state's financial distress, "but they exacerbate it."

Utah's Gov. Scott M. Matheson says that three years ago federal funds amounted to 25 per cent of his state's budget. Now federal funds have declined to 20 per cent, he says, "and we can expect that trend to continue."

Mr. Matheson, in dealing with requests for higher-education funds in his state, has adopted President Reagan's techniques of new federalism and block grants and lets the board of regents decide where reductions fall.

"My approach to funding education pro-

Continued on Page 6, Column 1

State Support per Student Varies Dramatically

WASHINGTON

State support of public colleges and universities this year varies from as little as $1,943 per student in New Hampshire to as much as $6,608 in Wyoming and $12,712 in Alaska.

North Dakota's legislature has earmarked more than 20 per cent of its total tax revenue for higher education—more than any other state. In Massachusetts, higher education gets only 5 per cent of the state's total tax revenue.

Such dramatic inequalities among the states reflect fundamental differences in wealth, population, taxation levels, and type of educational system, all of which complicate state-to-state comparisons.

An analysis of appropriations that takes into account a number of basic differences among the states has been developed by D. Kent Halstead, a senior research associate at the National Institute of Education.

Mr. Halstead's study is an attempt to provide a more thorough analysis of current appropriations in time to assist officials in higher education and the state legislatures who are developing budgets for colleges and universities for the next fiscal year.

Nationally, this year's average appropriation per student was $3,682, which represented 10.8 per cent of total state and local tax revenue, the Halstead study shows.

New York, for example, ranked forty-fifth in the portion of its revenue—7.8 per cent—earmarked for higher education, but its appropriation per student, $4,795, was the third largest in the country.

If local and state tax rates in New York had been at the national average in 1980, the state would have raised $838 per person.

Because its rates were 70 per cent above that average, New York raised $1,432 per

Continued on Page 8, Column 1

A CASE IN POINT

Massachusetts System Thrown into Turmoil by a Wrangle over Finances and Governance

By **ROBERT L. JACOBSON**

BOSTON

An expert on state systems of higher education calls it "the worst example of legislative meddling" he's ever seen. A state higher-education official here in Massachusetts calls it "political cowardice."

But the influential chairman of the ways and means committee of the Massachusetts State Senate, Chester G. Atkins, says such interpretations of recent events here are "dead wrong."

Legislative leaders are not trying to usurp authority over the state's 30-campus system of public higher education, he says. Nor have they changed their minds about giving substantial power to a newly established statewide board of regents.

It is simply that the system is going through the "intermediate" phase of a major revision of its governance, Mr. Atkins maintains.

Either way, it is clear that the public colleges and universities in Massachusetts have been thrown into considerable turmoil over the past year and a half, and it remains to be seen where they are headed both financially and structurally. Their problems illustrate how hard it can be for state authorities to reshape higher education in a time of retrenchment.

▪

What upsets many people in the higher-education system is not only what the legislature has been doing, but also how it has been doing it. Legislative budget makers can't seem to stay out of educational decision making, the critics contend.

They point out, for example, that when the legislature voted in 1980 to set up a 15-member board of regents—and thereby scrap the entire system's previous governing structure—it did so through a rider to the state's annual appropriations bill.

In addition to creating the new board, the measure eliminated both the office of the state education secretary and the statewide coordinating board for higher education, as well as several other multicampus boards.

The action took academic leaders by surprise. It also bypassed the legislature's

Continued on Page 4, Column 1

State Support

Continued from Page 1

person, second only to Alaska's $3,692, according to the Halstead analysis.

The Halstead study shows that enrollment of full-time-equivalent students per 1,000 population varies from 43.5 in Arizona to 19.1 in Pennsylvania.

Current data on state appropriations for higher education have been compiled each fall since 1958 by M. M. Chambers, professor of education administration at Illinois State University, and have been published every fall since 1967 by *The Chronicle*.

In addition to the appropriation amounts provided by Mr. Chambers, *The Chronicle* in recent years has added figures that compensate for state-to-state differences in wealth and population.

5 Criteria

The latest Chambers figures (*The Chronicle*, October 21, 1981), for example, show each state's higher-education appropriations per $1,000 of personal income and per capita. *The Chronicle* analysis of the Chambers data also includes an adjustment for inflation.

The table at right gives Mr. Halstead's rankings of the states according to five criteria: the enrollment of full-time-equivalent students in public colleges and universities per 1,000 population; each state's tax rates as a percentage of the national average; state and local tax revenue per capita; percentage of state and local tax revenues allocated to higher education, and appropriations per full-time-equivalent student in public colleges and universities.

Other Rankings

Other rankings from the Halstead analysis, which will be published in future issues of *The Chronicle*, include estimated tuition per student, the ratio of tuition revenue to appropriated funds, high-school graduates per 1,000 population, public-college enrollment per high-school graduate, and appropriations adjusted for inflation and a "systems cost index" of variations in state systems of higher education.

Mr. Halstead's "system cost index" is intended to adjust costs for differences in support required by different types of institution. A state in which the emphasis is on research universities will require greater appropriations per student than a state where most of the enrollment is in community colleges.

The national average appropriation per student in a two-year academic program in fiscal 1979, Mr. Halstead says, was $1,789. For two-year occupational programs, the average was $2,095.

Some 1980 Data Used

At research universities where sponsored research programs exceeded $50-million, the national average appropriation per student was $4,187 at those with medical programs and $3,380 at those without.

More than half the public-college enrollment in Hawaii and Iowa was in large research universities. In California and Florida, more than half the public enrollment was in two-year academic programs.

To avoid delay in publication of his analysis, Mr. Halstead uses year-old data on enrollment, taxable value, tax revenue, tuition, and population. Thus the 1981-82 appropriations are analyzed in terms of data from 1980.

Copies of the full study have been distributed to statewide higher-education agencies in each state. Additional copies will be available after March 1 for $5.14 each ($1.11 each in microfiche) from the Educational Resources Information Center, Document Reproduction Service, Box 190, Arlington, Va. 22210.

—JACK MAGARRELL

FACT-FILE

How the 50 States Rank

1. By public-college enrollment per 1,000 population
2. By percentage of U.S. average tax effort
3. By state and local tax revenue per capita
4. By percentage of revenue spent on higher education
5. By appropriations per full-time student

	1 Enrollment per 1,000 population (a)		2 Per cent of U.S. average tax effort (b)		3 Tax revenue per capita (c)		4 Revenue spent on higher education (d)		5 Appropriations per student (e)	
	Number	Rank	Per cent	Rank	Amount	Rank	Per cent	Rank	Amount	Rank
Alabama	30.8	20	82.8%	35	$ 612.90	50	17.6%	4	$ 3,498	24
Alaska	24.1	40	166.4%	2	3,692.80	1	8.3%	42	12,712	1
Arizona	43.5	1	103.3%	12	978.20	15	14.2%	12	3,193	30
Arkansas	23.4	41	84.4%	32	641.50	47	12.6%	24	3,441	38
California	39.0	3	95.7%	19	1,104.30	7	14.4%	10	4,087	4
Colorado	37.8	5	87.6%	27	968.30	17	11.2%	32	2,874	47
Connecticut	21.7	48	102.3%	13	1,059.20	10	7.9%	44	3,862	6
Delaware	38.7	4	87.4%	28	939.50	20	12.9%	20	3,129	33
Florida	23.0	43	69.0%	48	708.30	43	11.5%	31	3,547	12
Georgia	20.5	49	92.8%	20	750.40	37	12.3%	26	4,492	11
Hawaii	34.4	11	122.9%	4	1,261.20	4	12.7%	23	4,662	10
Idaho	28.2	27	81.0%	36	735.10	40	14.1%	13	3,688	8
Illinois	27.3	30	95.8%	18	1,049.00	11	9.6%	38	3,676	20
Indiana	26.0	34	78.0%	41	738.80	39	11.9%	28	3,377	35
Iowa	28.4	26	90.7%	22	957.60	18	12.2%	27	4,101	26
Kansas	37.2	7	86.1%	30	909.30	23	14.7%	9	3,587	36
Kentucky	24.4	39	80.4%	38	689.60	44	14.1%	14	3,975	19
Louisiana	26.7	31	74.5%	44	808.80	30	13.3%	19	4,017	21
Maine	21.7	46	108.5%	8	845.60	26	7.6%	47	2,948	37
Maryland	30.1	23	106.0%	9	1,024.60	13	9.9%	37	3,383	41
Massachusetts	22.4	44	137.1%	3	1,230.50	5	5.0%	50	2,764	34
Michigan	33.7	12	105.4%	10	1,060.80	9	9.5%	39	2,993	42
Minnesota	29.8	24	105.2%	11	1,079.80	8	11.6%	30	4,194	17
Mississippi	30.3	22	90.9%	21	637.00	48	19.5%	2	4,108	13
Missouri	25.4	38	79.3%	40	742.90	38	10.3%	34	3,008	39
Montana	33.4	13	88.3%	26	984.60	14	11.1%	33	3,257	23
Nebraska	34.8	10	100.4%	16	940.90	19	14.0%	15	3,773	45
Nevada	26.2	33	49.6%	50	812.60	29	10.2%	35	3,15[illegible]	14
New Hampshire	22.0	45	72.7%	46	688.60	45	6.2%	49	1,943	50
New Jersey	21.7	47	113.3%	6	1,118.10	6	6.2%	48	3,207	28
New Mexico	31.5	17	80.9%	37	845.70	25	16.1%	7	4,320	15
New York	23.3	42	170.8%	1	1,432.50	2	7.8%	45	4,795	3
North Carolina	30.5	21	89.6%	25	725.10	42	17.5%	5	4,156	5
North Dakota	43.0	2	76.0%	43	809.30	31	20.7%	1	3,890	9
Ohio	25.7	36	83.3%	34	797.00	32	8.3%	41	2,572	48
Oklahoma	32.0	15	70.0%	47	794.60	33	13.7%	16	3,406	43
Oregon	36.1	9	90.1%	23	933.10	21	12.9%	21	3,320	32
Pennsylvania	19.1	50	101.7%	14	912.60	22	7.6%	46	3,613	22
Rhode Island	26.1	35	119.1%	5	975.20	16	9.2%	40	3,458	25
South Carolina	27.8	29	89.9%	24	682.80	46	16.7%	6	4,112	16
South Dakota	29.7	25	83.6%	33	758.40	36	10.0%	36	2,545	46
Tennessee	25.4	37	80.0%	39	631.60	49	12.3%	25	3,059	44
Texas	31.7	16	62.4%	49	763.00	35	18.1%	3	4,354	7
Utah	33.0	14	96.4%	17	827.30	28	14.4%	11	3,609	40
Vermont	27.8	28	101.1%	15	838.00	27	8.0%	43	2,403	49
Virginia	31.4	18	85.5%	31	792.90	34	12.8%	22	3,237	27
Washington	36.4	8	86.9%	29	891.80	24	13.5%	18	3,308	29
West Virginia	26.3	32	76.2%	42	728.90	41	13.5%	17	3,742	18
Wisconsin	37.4	6	110.7%	7	1,048.20	12	11.8%	29	3,314	31
Wyoming	30.9	19	74.0%	45	1,387.90	3	14.7%	8	6,608	2
U.S. average	**29.0**		**100.0%**		**$ 986.50**		**10.8%**		**$3,682**	

(a) Number of full-time-equivalent students enrolled in public colleges and universities per 1,000 population in the fall of 1980.

(b) State and local tax revenue in 1980 as a percentage of the revenue that would be collected if the state's wealth were taxed at national average rates.

(c) State and local tax revenue per capita in 1980.

(d) Per cent of total state and local tax revenue appropriated for current operating expenses of public higher education in 1981-82. Appropriations data from M.M. Chambers, Illinois State University.

(e) Appropriations of state and local tax revenue for current operating expenses of public higher education per full-time-equivalent student in 1981-82.

SOURCE: D. KENT HALSTEAD, NATIONAL INSTITUTE OF EDUCATION

Run-Off Scheduled in California Collective-Bargaining Election

By JACK McCURDY

SACRAMENTO, CAL.

A run-off election will be held about April 1 to determine which of two unions will be the collective-bargaining agent for nearly 20,000 faculty members in the California State University system.

Balloting in the first faculty collective-bargaining election in the 19-campus system ended last week with neither union receiving a majority of the votes cast.

The United Professors of California, affiliated with the American Federation of Teachers (A.F.L.-C.I.O.), received 6,316 votes. The Congress of Faculty Associations, affiliated with the American Association of University Professors and with the National Education Association, received 6,267. There were 2,400 votes against having a collective-bargaining agent.

State officials said 15,424 ballots were cast, representing 80 per cent of the 19,329 full-time and part-time faculty members who were eligible to take part in the election.

A run-off election is also required between the two unions to determine which will represent the system's academic-support employees, such as librarians and counselors.

Those employees cast 505 votes for the United Professors of California, 391 for the Congress of Faculty Associations, and 123 for no agent.

Results of the run-off elections are expected about May 1.

In a third bargaining election, the system's 140 physicians and dentists chose the Union of American Physicians and Dentists, an independent unit, as their agent. The physicians and dentists cast 83 votes for the union, 19 for no agent, and 3 for the United Professors of California.

The large turnout in the faculty election was applauded by both unions, whose spokesmen said it demonstrated that faculty members wanted collective bargaining. The system's trustees and the administration had expressed hope that the faculty would reject collective bargaining.

The delay imposed by the run-off election means the final winner will not be certified as agent in time to engage in collective bargaining for a contract this year.

The California law authorizing collective bargaining by faculty members at the state's colleges and universities was passed in 1978. Both unions have expressed frustration over delays in holding a bargaining election and starting negotiations for the first contract.

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News Summary

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Federal restrictions on genetic research should be relaxed but not abandoned, an independent advisory group has recommended. Story on Page 3.

There was no victor in the battle that ended in the disbanding of Michigan State University's independent alumni association, both sides agree. Story on Page 7.

Median salaries for administrators rose 10 per cent during the last year, outpacing the cost of living. Story on Page 6.

Financial ambition is an important reason why students go to college, an annual survey of new college freshmen has found. Story on Page 10.

Public-college tuition will average $957 this year—ranging from a high of $3,893 in Vermont to a low of $409 in California. Story on Page 14.

Florida may not deny state funds to colleges supporting organizations that advocate sex before marriage, the state's supreme court has ruled. Story on Page 9.

The first grants under the $150-million Annenberg Project to explore the use of telecommunications in higher education have been awarded by the Corporation for Public Broadcasting. Story on Page 10.

Deconstruction and other new critical theories are challenging the traditional assumptions of literary studies. Story on Page 27.

Polish universities reopened last week, two months after military authorities shut the institutions down. Story on Page 25.

South African students have protested the death in detention of a white doctor active in trade-union work. Story on Page 25.

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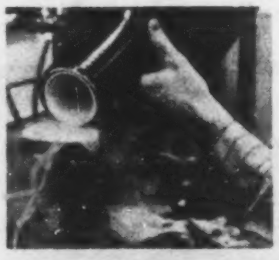

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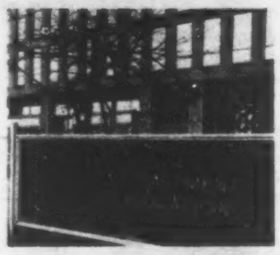

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'Early Semester' Calendars Found Most Popular

By MARIA RUDENSKY

The first thing some students look at when the college catalogue arrives is the section with the academic calendar—to find the date classes are scheduled to end.

While that may not be the first place a prospective student looks, says Orville C. Walz, an expert on academic calendars, some institutions could be using the calendar as a recruiting device in an era of shrinking applicant pools.

Mr. Walz, president of Concordia College in Edmonton, Alberta, published his annual study of academic calendars last month. The most commonly used at American institutions of higher education, he found, are the "early semester" calendar, the quarter calendar, the 4-1-4 calendar, and the "traditional" calendar—in that order.

"The early and quarter are where it's at now," Mr. Walz says. Using information supplied by college registrars to the National Association of College Stores, he has been surveying temporal matters in academe for the past four years. The results are published by the American Association of Collegiate Registrars and Admissions Officers. Similar studies have been conducted since 1970.

More Early Semesters

Mr. Walz's figures show a significant rise in the number of institutions following the early-semester plan, usually starting in late August and going until mid-May. In 1970-71, it was the second most popular option, used by more than a quarter of the institutions. In 1981-82, it is in effect at more than half. Conversely, use of the traditional calendar—which stretches from after Labor Day until mid-June—has declined dramatically. In the 1970-71 academic year, 36 per cent of the institutions in Mr. Walz's survey used it, while this year only 5 per cent do.

The 4-1-4 schedule is used mainly by smaller colleges, he says. It offers students and faculty members the month of January for internships or intensive study away from the campus. It is sometimes used as an energy-saving device by institutions in the northern parts of the country.

The quarter plan, in which the academic year is divided into four parts starting in September, January, March, and June, was intended to encourage students to attend classes during the summer, and to provide an opportunity for more experimentation in coursework. At some institutions, however, faculty members have been debating the merits of a calendar that stretches until mid-June, because it gives students a late start in the summer job market.

Mr. Walz says some institutions point out what they see as disadvantages of a rival's calendar in an effort to attract students.

"At the University of Southern California, for example, students could be told, 'You'll be out by the end of April, while the University of California at Los Angeles's semester stretches until mid-June,' "—implying, Mr. Walz says, that by coming to U.S.C., students looking for summer jobs could get a jump on those at U.C.L.A. On the other hand, he points out, students at U.C.L.A. could work at their summer jobs until well into September.

In the University of California system, several campuses have considered switching from the quarter system to the early semester, but the only one to make the change so far is Berkeley. The move will be put into effect in the fall of 1983.

Such changes can play a role in campus politics, Mr. Walz says, because administrators must fit courses into two sessions, rather than three—which may mean that some courses would have to be eliminated.

The other campuses considering the early-semester are not likely to adopt it, says Patricia Bassett, assistant to Samuel Aroni, chairman of the U.C.L.A. academic senate.

"People are attached to the status quo," Ms. Bassett says. "There is also concern among faculty over their F.T.E. standing."

The number of full-time students, or "full-time equivalents," is used on many campuses to measure faculty members' teaching loads.

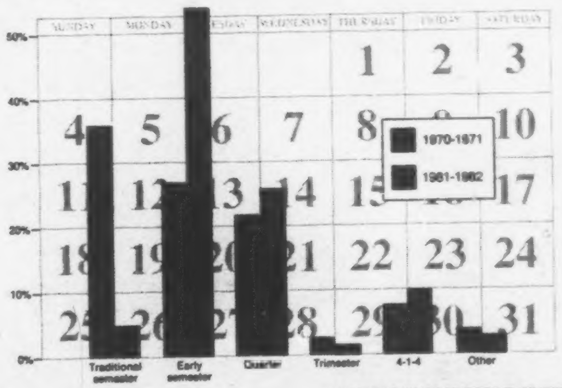
Mr. Walz says some institutions are adopting the early-semester instead of the quarter calendar because of a desire for uniformity among institutions in one state.

At Iowa State University, for example, nearly 60 per cent of the faculty members approved a switch from the quarter to the early-semester calendar.

John Sjoblom, registrar at Iowa State, cites several reasons for the change, which will become effective in the fall. Most important, the semester system cuts by one-third the paperwork involved in registration, administration of final examinations, grading, and graduation.

Another reason Iowa State faculty members approved the semester system, Mr. Sjoblom says, is because "it reduces the tendency toward compression and fragmentation of courses . . . and allows students to plan their entire year's coursework ahead of time."

Changes in Academic Schedules over 10 Years



CHRONICLE CHART BY PETER H. STAFFORD

More than half of U.S. colleges use early-semester plans, which usually extend from August to May. In 1970-71, only about 25 per cent used that calendar.

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the wake of allegations against him by faculty members, administrators, and students.

J. Renwick Jackson, Jr., announced his resignation from the post he had held since 1969, following a recent meeting with the board of trustees at which "concerns about various activities" were raised, a spokesman for the college said. Few specific details have been made public.

Richard D. Weigle, a board member and former president of St. John's College in Maryland and New Mexico, has been named interim president of St. Mary's. Mr. Jackson has been hired as a senior consultant to the American Association of State Colleges and Universities.

▪ Female Law Enrollments Have Doubled Since 1974

The number of women enrolled in law schools approved by the American Bar Association has more than doubled since 1974, according to an association survey, but the rate of increase for the enrollment of women in first-year classes has dropped markedly in the past year.

The survey, covering 172 A.B.A.-approved law schools, found that the enrollment of women last fall totaled 44,986, about 35.3 per cent of all law students. That compared with enrollment of 21,788 women in 1974-75, accounting then for about 19.7 per cent of all students at 153 A.B.A.-approved schools.

In first-year classes, the number of women was up last fall by only 3.4 per cent, compared with a 13.2-per-cent gain the previous year.

Overall law-school enrollment rose 1.7 per cent this year, to 127,531, while the number of male students declined slightly for the sixth consecutive year.

▪ Clarification

Senior Learning Times, described in the January 13 issue of *The Chronicle*, is available from the College Board, Box C749, Pratt Street Station, Brooklyn, N.Y. 11205. Payment of $1.50 for single copies or $12 for 50 copies must accompany order.

▪ Correction

A Fact-File in the *The Chronicle*, January 27, reporting the Association of Research Libraries rankings of research libraries in 1980-81, gave an incorrect figure for spending for materials at Yale University. The correct amount for Yale is $3,334,137.

NIH Asked to Relax Gene-Research Rules

WASHINGTON

An independent advisory committee recommended last week that the National Institutes of Health relax—but not wholly discontinue—their regulation of gene-splicing research.

The Recombinant DNA Advisory Committee asked the director of N.I.H. to reject a proposal, tentatively adopted by the committee last September, which would have lifted virtually all federal regulation of experiments in which gene-splicing techniques are used.

Instead, it asked the director to adopt a plan in which the present mandatory restrictions on such research would be further relaxed, but not abandoned.

The plan would continue to require biosafety committees at universities to review the safety of certain categories of genetic experiments.

The institutes currently prohibit scientists receiving agency support from conducting five classes of experiments using recombinant DNA or gene-splicing techniques.

The proposal adopted by the committee in a 16-to-5 vote last week would be less stringent, requiring that the agency review the safety of three classes of experiments before they are conducted. Those experiments involve cloning genes for toxins, cloning genes for drug-resistant traits, and deliberately releasing genetically altered organisms into the environment.

Researchers who violate the rules could lose their federal research support, as is the case under the current guidelines.

Susan K. Gottesman, a senior investigator in molecular biology at N.I.H., drafted the proposal that was adopted by the committee as a compromise between lifting all federal regulation of genetic-engineering research and continuing to regulate researchers under the agency's current guidelines.

Most scientists believe that the potential health hazards from recombinant-DNA research are not as great as was feared in 1976, when the guidelines were adopted by N.I.H.

David Baltimore, professor of microbiology at the Massachusetts Institute of Technology and a member of the N.I.H. advisory committee, proposed last year that the guidelines be made voluntary—to reflect scientists' confidence in the safety of such research.

Some members of the committee objected to his proposal, fearing that the public would react unfavorably to the elimination of all federal control and push for more stringent local laws controlling such research.

An N.I.H. spokesman said the committee had been strongly influenced by letters from the public, including scientists, asking that the agency not adopt Mr. Baltimore's proposal.

—KIM McDONALD

Notes on . . .

Hispanic Studies

Many Hispanic educators say America's Spanish-speaking population has been insufficiently examined by social scientists. Academic studies of the condition of the education of Hispanics are in an especially "primitive" state, says Michael A. Olivas, research director for the League of Latin American Citizens.

As recently as 1973, a major summary of research on college students had no references to studies on Hispanic students, and so far no one has written a book on such students, Mr. Olivas points out in a recent report for Stanford University's Institute for Research on Education Finance and Governance.

Researchers, he adds, have yet to explain why bilingual education programs have been inadequate in most states, why Spanish-speaking students account for a large proportion of high-school dropouts, and why there are relatively few Hispanic students in four-year colleges.

Mr. Olivas's report, *Research on Hispanic Education: Students, Finance and Governance*, argues that many studies lump Hispanics with blacks under "minorities," and others fail to take into account regional differences or distinctions among Hispanic groups.

Other research tends to "blame Hispanics for their own school failure," Mr. Olivas contends.

▪

Albert M. Camarillo, director of the Stanford Center for Chicano Research at Stanford University, insists that the situation is improving. "In the past 10 years, research on Chicanos and Hispanics in general has tripled," he says.

Despite recent cuts in federal research funds, he says, interest in research on Hispanics is building, mainly because of the rapidly growing Hispanic population in this country.

The one-year-old Stanford center has just completed its "planning stage," and is preparing to begin a study of the historical development and current status of Mexican-American communities in Chicago, Los Angeles, and San Antonio, among other projects.

▪

Another developing undertaking is the National Hispanic University, which recently received state authorization to operate as a higher-education institution in California. The Oakland-based university is scheduled to begin classes this summer.

The university is an outgrowth of the National Hispanic Center for Advanced Studies and Policy Analysis, which is trying to "attract some of the best minds in the country to address different issues that affect the Hispanic community," says B. Roberto Cruz, president of the university and director of the center.

▪

Plans are also under way to establish a Hispanic Research Center at the University of Chicago. The National Opinion Research Center, an affiliate of the university, has received a $250,000 planning grant for the center from CBS Inc., and several private foundations have shown interest in supporting the project.

According to Pastora San Juan Cafferty, an associate professor at Chicago's school of social-service administration and director of planning for the center, it will "improve the quality, volume, and accessibility of objective information about Hispanics."

—LORENZO MIDDLETON

Salaries Are Up 10 Pct. in Year for Administrators

By JACK MAGARRELL

WASHINGTON

Median salaries of college and university administrators this year are up 10 per cent over last year, a survey by the College and University Personnel Association has found.

Salaries of administrators at public colleges and universities have risen by 8 per cent in the past year, according to the association, compared with an increase of 11.6 per cent for administrators at private institutions.

The survey collected data on 94 administrative positions from 1,391 colleges and universities.

On the average, percentage increases in administrators' salaries exceeded those of faculty members and the rise in the cost of living. The government's Consumer Price Index rose 8.9 per cent in 1981. Last fall's Chronicle Survey of faculty salaries for 1981-82 (*The Chronicle*, November 11) showed an overall increase of 9.2 per cent in median salaries.

The CUPA survey found that median salaries of women in administrative jobs were 45 per cent lower on the average than those of their male counterparts.

Median salaries of administrators who are members of minority groups average 12.7 per cent less this year than those of administrators who are not members of minority groups.

Salaries over $100,000

The report listed—but not by name or institution—57 administrators whose salaries this year exceed $100,000. Among them are 24 presidents and chancellors, 16 medical deans, 6 chief health-professions officers, 3 comptrollers, and 2 administrators of grants and contracts. The others are: a chief academic officer, a chief business officer, a chief development officer, a chief planning officer, an athletic director, and an administrator of a hospital medical center.

Increases in administrators' salaries generally were smaller at universities than at other types of institutions: 6.7 per cent, compared with 10.2 per cent at four-year and two-year colleges.

Adminstrators dealing with student affairs generally received larger increases than others—averaging 13 per cent, compared with 9 or 10 per cent for people in other areas.

Geographically, administrators in the South received the largest average increases, 11.9 per cent. The survey found that the one-year pay increases averaged 10.1 per cent in the East, 9.6 per cent in the Northwest, 9.3 per cent in the Midwest, and 8.5 per cent in the Southwest.

Administrators who were transferred or promoted within an institution were paid 4 per cent more, on the average, than those hired from outside the institution, the survey found.

For the first time, the CUPA survey reported the length of time administrators had held their present jobs.

Half the college and university presidents, for example, have held their posts for five years or less; a fourth of them have held the same jobs for nine years or more.

The position with the greatest stability, judging from the survey results, is that of director of men's athletics. Half of the people in that position have been in the same job for at least 8 years, and a fourth have held the same job of 14 years or more.

The report, *1981-82 Administrative Compensation Survey*, includes 86 tables showing administrative salaries by type and size of institution. Copies are available at $125 each ($60 for survey participants and $25 for association members) from the College and University Personnel Association, 11 Dupont Circle, Washington 20036.

FACT-FILE

Median Salaries of Administrators for 1981-82

	Public institutions	Private institutions	All universities	4-year institutions	2-year colleges	All institutions	1-year change	3-year average
Chief executive of a system	$63,100	$59,200	$70,000	$52,830	$57,600	$62,700	+ 6.2%	+ 8.2%
Chief executive of a single institution	52,000	50,000	62,300	50,000	46,461	51,744	+ 7.5%	+ 8.1%
Executive vice-president	46,000	40,000	53,820	39,000	41,189	43,500	+11.9%	+ 7.1%
Chief academic officer	43,000	37,525	52,800	37,715	36,630	41,110	+ 9.5%	+ 8.1%
Chief budgeting officer	33,580	31,008	36,000	28,900	29,824	33,169	+ 8.6%	+ 8.3%
Chief business officer	40,535	35,500	50,000	35,000	34,936	39,000	+ 9.1%	+ 9.2%
Chief development officer	36,500	33,700	42,039	32,500	28,688	35,000	+ 9.1%	+ 9.1%
Chief development and public-relations officer	35,076	39,984	44,300	33,389	27,864	35,800	+10.9%	+ 9.4%
Chief health-professions officer	43,224	54,400	72,345	32,000	32,182	47,980	+24.2%	+13.6%
Chief planning officer	37,640	32,100	42,070	30,555	33,120	36,570	+ 9.7%	+ 8.3%
Chief planning and budget officer	42,425	33,350	46,413	33,000	34,004	41,669	+ 6.8%	+ 7.9%
Chief public-relations officer	31,078	22,000	36,480	22,000	25,848	26,712	+11.5%	+11.1%
Chief student-affairs officer	37,837	29,052	42,465	29,318	33,612	34,330	+ 9.4%	+ 8.9%
Administrator, grants and contracts	32,400	23,850	34,000	23,200	27,512	30,070	—	—
Administrator, hospital medical center	61,500	68,000	62,402	—	—	61,500	—	—
Bursar	23,882	19,910	26,700	18,500	19,350	22,099	—	—
Comptroller	31,800	27,201	36,000	24,879	27,000	29,895	+ 9.0%	+ 8.5%
Registrar	28,660	21,929	30,000	22,320	25,420	25,468	+ 9.4%	+ 8.7%
Director, admissions	28,826	25,500	30,640	25,455	25,644	27,287	+ 9.9%	+ 9.4%
Director, admissions and financial aid	31,075	29,500	36,796	27,000	26,487	30,000	+ 8.3%	+10.6%
Director, affirmative action, equal employment	28,892	26,500	30,140	25,000	25,688	28,600	+12.2%	+10.1%
Director, alumni affairs	24,500	20,000	25,662	18,600	16,000	21,907	+ 7.3%	+ 8.0%
Director, athletics	33,867	27,350	36,586	27,229	29,500	30,902	+ 8.6%	+ 9.7%
Director, athletics, men	35,319	27,932	36,967	28,894	29,491	32,341	—	—
Director, athletics, women	28,704	21,333	28,000	21,333	28,986	25,485	—	—
Director, auxiliary services	30,804	25,000	35,040	25,438	25,155	30,000	—	—
Director, bookstore	21,000	15,120	24,660	14,609	16,721	18,150	+11.5%	+ 9.6%
Director, campus recreation and intramurals	23,149	18,126	24,500	17,316	23,023	21,660	—	—
Director, campus security	24,000	19,180	25,590	18,850	20,604	21,751	+10.9%	+ 8.8%
Director, church relations	—	19,500	25,500	18,667	—	20,000	—	—
Director, community services	29,209	22,988	30,011	23,500	29,172	28,408	+ 5.2%	+ 4.9%
Director, computer services	32,350	27,000	36,600	26,106	28,200	29,999	+10.7%	+ 9.4%
Director, development and alumni affairs	33,060	30,000	35,000	26,100	31,881	32,044	+17.0%	+ 4.7%
Director, educational-media services	27,210	19,520	27,800	19,740	23,014	23,831	—	—
Director, employee training	25,236	23,800	24,192	—	33,000	24,972	—	—
Director, food services	25,850	23,000	28,548	22,500	19,664	24,069	+ 7.8%	+ 8.3%
Director, foreign students	24,840	20,952	24,150	20,000	25,281	24,000	—	—
Director, housing and food services	—	31,176	36,000	25,640	—	—	+ 6.9%	+ 9.7%
Director, information office	24,579	21,500	2[illegible],608	20,200	21,264	23,408	+ 9.2%	+ 6.5%
Director, information systems	35,104	33,000	37,250	25,000	33,150	34,726	+11.2%	+10.8%
Director, institutional research	30,866	24,500	33,500	25,333	27,900	29,697	+ 8.2%	+ 7.1%
Director, internal audit	29,000	26,400	29,700	21,600	27,100	28,380	—	—
Director, international-studies education	32,244	25,761	33,602	25,000	30,400	31,000	—	—
Director, learning-resources center	30,400	20,604	32,894	21,505	29,200	28,408	—	—
Director, legal services	39,000	45,617	42,600	30,729	33,000	41,000	+10.6%	+11.8%
Director, library services	32,520	24,376	38,000	24,700	26,416	28,427	+ 8.8%	+ 9.0%
Director, news bureau	25,210	18,100	24,726	16,950	22,426	21,200	—	—
Director, personnel and affirmative action	26,729	22,000	29,478	22,000	24,024	25,530	+ 9.1%	+ 4.6%
Director, personnel and human resources	32,150	25,500	33,700	23,650	30,456	29,700	+ 8.4%	+10.2%
Director, physical plant	30,000	24,700	35,172	24,404	26,316	27,995	+ 9.3%	+ 8.8%
Director, publications	25,560	20,604	25,414	19,360	23,588	23,000	—	—
Director, purchasing	25,282	20,700	27,242	20,000	23,154	24,000	+ 9.7%	+ 9.3%
Director, risk management and insurance	28,548	25,000	30,218	—	22,049	27,600	—	—
Director, special and deferred gifts	30,000	25,300	30,000	23,353	27,903	27,400	—	—
Director, student counseling	29,047	22,863	29,615	22,550	27,427	26,994	+ 8.1%	+ 8.2%
Director, student financial aid	25,296	20,100	27,540	20,295	23,280	23,307	+10.8%	+ 9.1%
Director, student health services								
Physician	47,907	40,000	49,932	37,667	25,132	46,667	—	—
Nurse	20,000	15,600	19,000	15,693	18,500	17,417	—	—
Director, student housing	24,987	17,250	25,080	17,582	17,012	20,943	+10.7%	+ 7.6%
Director, student placement	25,574	19,770	26,250	19,800	22,600	22,600	+ 9.5%	+ 7.8%
Director, student union	26,145	19,000	26,145	20,000	25,463	24,000	+ 8.9%	+ 9.4%
Dean, architecture	48,072	50,000	49,500	34,667	—	48,150	+ 5.4%	+ 7.5%
Dean, agriculture	45,140	—	51,600	—	30,400	44,991	+10.2%	+ 9.7%
Dean, arts and letters	39,305	32,400	45,450	32,583	35,370	39,005	+ 8.2%	+ 5.9%
Dean, arts and sciences	42,152	43,000	46,776	40,141	32,120	42,350	+ 9.5%	+ 8.5%
Dean, business	39,238	40,667	48,048	36,816	31,621	39,828	+ 8.5%	+ 8.0%
Dean, communications	34,528	32,450	44,420	29,200	30,342	34,500	− 0.6%	+ 6.0%
Dean, continuing education	36,000	29,160	38,920	29,000	31,326	33,825	+ 9.4%	+ 8.8%
Dean, dentistry	64,719	66,780	66,769	—	37,467	64,719	+ 6.4%	+ 8.1%
Dean, education	44,000	33,722	46,440	36,043	30,009	42,239	+ 6.9%	+ 7.9%
Dean, engineering	48,072	51,084	55,000	40,125	31,288	48,700	+10.7%	+ 8.4%
Dean, experimental programs	—	—	—	20,000	34,075	—	—	—
Dean, extension	36,728	24,737	46,000	27,000	30,485	36,700	+ 2.0%	+ 4.7%
Dean, fine arts	40,700	32,000	45,000	30,667	32,275	38,848	+11.1%	+ 7.9%
Dean, graduate programs	44,855	36,400	45,500	34,856	—	42,922	+ 8.8%	+ 7.5%
Dean, health-related professions	37,000	37,450	47,540	37,000	32,976	37,000	+ 3.0%	+ 9.5%
Dean, home economics	42,080	27,650	45,600	27,864	26,085	40,146	+ 4.9%	+ 8.1%
Dean, humanities	35,552	28,837	41,508	29,500	32,578	33,205	+ 8.5%	+ 9.1%
Dean, instruction	40,538	—	—	—	40,396	—	+14.8%	+16.1%
Dean, law	60,345	62,190	62,004	—	—	61,798	+11.3%	+ 9.6%
Dean, library and information sciences	38,700	34,240	42,330	36,060	30,980	38,600	− 0.7%	+ 8.1%
Dean, mathematics	34,011	24,046	—	26,003	31,568	31,500	—	—
Dean, medicine	80,000	95,000	83,400	—	—	81,303	+ 4.1%	+ 8.0%
Dean, music	38,400	33,722	40,020	27,031	31,524	36,100	+ 8.1%	+ 7.5%
Dean, nursing	37,500	33,600	44,028	32,100	30,420	36,634	+ 6.2%	+ 6.3%
Dean, pharmacy	53,200	52,000	53,004	—	—	53,200	+ 9.1%	+ 7.4%
Dean, public health	—	—	—	—	—	—	+42.2%	+11.9%
Dean, sciences	37,300	29,200	45,570	32,277	33,732	36,000	+10.1%	+ 7.8%
Dean, social sciences	34,000	26,593	38,925	30,600	32,000	32,843	+ 8.0%	+ 8.8%
Dean, social work	46,560	35,000	48,825	28,997	—	45,840	+15.2%	+ 8.6%
Dean, special programs	30,800	26,400	—	28,880	29,390	29,390	+14.0%	+ 6.1%
Dean, undergraduate programs	39,868	36,000	45,840	33,000	33,000	39,200	+ 3.0%	+ 4.7%
Dean, veterinary medicine	—	—	60,000	—	—	—	+ 7.3%	+ 7.9%
Dean, vocational education	35,630	26,182	41,640	35,330	33,319	35,258	+ 6.1%	+ 8.7%

— No data

SOURCE: COLLEGE AND UNIVERSITY PERSONNEL ASSOCIATION

This Year's Freshmen Found Oriented Toward Financial Success

LOS ANGELES

This year's college freshmen, more than their recent predecessors, have money on their minds.

A survey of the characteristics and attitudes of 192,248 students who entered college as first-year students last fall has found that financial success is a big reason for their going to college and an important goal in their lives.

Only 10 years ago, fewer than half the freshmen said that being "able to make more money" was a very important reason for going to college. Now 67 per cent term it very important.

Student interest in business careers has nearly doubled since 1968, the survey found. This year, nearly a fourth of all freshmen plan to major in some aspect of business, and a tenth plan to be business executives.

The proportion of students who say that "being very well off financially" is a very important goal has grown from 49 per cent in 1969 to 65 per cent in 1981.

"This increasing materialism has been accompanied by increased political conservatism," says Alexander W. Astin, director of the survey.

21 Pct. Are Conservative

The proportion of freshmen who label themselves conservative, including those who consider themselves "far right," has increased from about 17 per cent three years ago to nearly 21 per cent this year.

The proportion of conservatives among new students was even higher in 1969. In that year of anti-war demonstrations, 23 per cent of the freshmen called themselves conservative.

As usual, a majority of students this year—nearly 60 per cent—put themselves in the middle of the road politically. The proportion who identify themselves as "far left" dropped to 1.6 per cent this year from 2.1 per cent last year, while those who call themselves "far right" dropped to 1.1 per cent from 1.2 per cent.

There are now 21 per cent to the right and 20 per cent to the left of middle, according to the survey, compared with 15 per cent on the right and 38 per cent on the left a decade ago.

Mr. Astin notes a decline in the proportion of students who give major importance to idealism and helping others.

In the past year alone, the proportion of freshmen who say they include "helping others in difficulty" among "very important life goals" has declined from 65 per cent to 63 per cent; "participating in programs to clean up the environment" from 27 per cent to 25 per cent; and "helping to promote racial understanding" from 33 per cent to 31 per cent.

The goal of "developing a meaningful philosophy of life" was rated very important by 83 per cent of the freshmen in 1967, by 50 per cent last year, and by 49 per cent this year.

'Selfish and Materialistic'

"This pattern of declining altruism and idealism, together wih increasing conservatism and materialism, may mean that selfish and materialistic interests are difficult to reconcile with concerns about the quality of life and the welfare of others," Mr. Astin says. "In recent years the latter seem to be losing ground to the former."

The surveys of new freshmen have been conducted since 1966 as part of the Cooperative Institutional Research Program sponsored by the University of California at Los Angeles and the American Council on Education.

The 1981 survey includes data from 192,248 entering freshmen at 368 colleges and universities. Part-time students were not included. Students at most proprietary, special vocational, and semiprofessional institutions were not included, but those attending two-year colleges with occupational programs were included.

Copies of the report are available for $7.50 each from the Cooperative Institutional Research Program, Graduate School of Education, University of California, Los Angeles 90024.

First 6 Grants in TV Project Total $5-Million

WASHINGTON

The Annenberg Project, a $150-million plan to bring college-level courses to television, took a step on its way from the drawing board to the airwaves last week. The Corporation for Public Broadcasting, which administers the project, announced that six institutions had been awarded a total of $5-million to create "telecourses."

Walter H. Annenberg, publisher of *TV Guide* and former U.S. Ambassador to Great Britain, last year pledged $10-million a year for 15 years to explore the use of telecommunications in higher education.

Proposals for grants from the Corporation for Public Broadcasting/the Annenberg School of Communications Project will be considered twice a year. The deadline for the next round of proposals is April 5. Decisions on those applications are expected to be made in September.

The six first-round winners are:

▶ A consortium of four institutions—the Coast Community Colleges, Dallas County Community College, Miami-Dade Community College, and the Southern California Consortium for Community College Television: for a telecourse in English composition and rhetoric and one in computers. The courses, which will lead to associate and bachelor's degrees, are scheduled to be available in the spring of 1984.

▶ The California Institute of Technology: for a telecourse in introductory physics to be entitled "The Mechanical Universe," scheduled for the fall of 1984.

▶ The American Political Science Association and WETA-TV in Washington: for a telecourse called "Congress: We the People" to be available by the end of 1983.

▶ New York's WNET-TV, in collaboration with W. H. Freeman, the book-publishing affiliate of *Scientific American:* for an introductory physiological-psychology telecourse called "Brain, Mind, and Behavior." It will be based on the television series "The Brain" and is projected for 1984.

▶ The Committee on Institutional Cooperation, a consortium of several Big 10 universities and the University of Chicago: for the creation of audio portions of TV programs and radio components for some of its bachelor's-level correspondence courses. The experiment is designed to determine how audio and radio can improve student performance and interest in those courses.

▶ The University of Nebraska at Lincoln: to demonstrate and test alternative instructional approaches in videodisc form. The money will be used for courses in physics, chemistry, and biology. —MARIA RUDENSKY

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FACT-FILE

Freshman Characteristics and Attitudes

A national profile based on responses of 192,000 students who entered college in the fall of 1981

Characteristics

Age by December 31, 1981:	
16 or younger	0.1%
17	2.5%
18	74.1%
19	18.8%
20	1.9%
21	0.7%
22	0.4%
23-25	0.7%
26-29	0.4%
30 or older	0.6%

Racial background:	
White/Caucasian	88.5%
Black/Negro/Afro-American	8.6%
American Indian	1.0%
Oriental	1.1%
Mexican-American/Chicano	0.9%
Puerto Rican-American	0.6%
Other	1.5%

Average grade in high school:	
A or A+	9.2%
A–	11.4%
B+	19.3%
B	26.7%
B–	14.2%
C+	11.8%
C	7.1%
D	0.3%

Academic rank in high school:	
Top 20%	39.2%
Second 20%	23.6%
Middle 20%	30.4%
Fourth 20%	6.0%
Lowest 20%	0.8%

Year of high-school graduation:	
1981	93.8%
1980	2.7%
1979	0.7%
1978 or earlier	1.7%
H. S. equivalency (G. E. D. test)	0.7%
Never completed high school	0.3%

Marital status:	
Not presently married	98.7%
Married, living with spouse	1.1%
Married, not living with spouse	0.3%

Veteran:	
No	98.7%
Yes	1.3%

Have had remedial work in:	
English	5.2%
Reading	5.1%
Mathematics	7.0%
Social studies	3.9%
Science	3.8%
Foreign language	3.1%

Will need remedial work in:	
English	11.6%
Reading	4.7%
Mathematics	21.4%
Social studies	2.6%
Science	9.0%
Foreign language	7.6%

Disabled:	
No	94.3%
Yes	5.7%

Type of disability:	
Hearing	8.9%
Speech	2.1%
Visual	48.9%
Orthopedic	13.6%
Learning disability	5.2%
Health-related	12.4%
Other	6.5%

Does handicap require architectural accommodations?	
No	98.3%
Yes	1.7%

Residence planned during fall term:	
With parents, relatives	30.3%
Other private home or apartment	5.9%
College dormitory	60.6%
Fraternity/sorority house	0.7%
Other campus housing	1.7%
Other	0.8%

Residence preferred during fall term:	
With parents or relatives	18.5%
Other private home or apartment	24.7%
College dormitory	45.8%
Fraternity/sorority house	4.9%
Other campus housing	4.0%
Other	2.3%

Current religious preference:	
Jewish	3.0%
Protestant	35.4%
Roman Catholic	37.0%
Other	17.3%
None	7.3%

Are you a reborn Christian:	
No	73.7%
Yes	26.3%

Father's religious preference:	
Jewish	3.4%
Protestant	37.4%
Roman Catholic	36.1%
Other	16.6%
None	6.6%

Father's occupation:	
Artist (incl. performer)	0.8%
Businessman	29.0%
Clergy or religious worker	1.1%
College teacher or admin.	0.9%
Doctor or dentist	2.2%
Educator (secondary)	3.6%
Educator (elementary)	0.6%
Engineer	8.8%
Farmer or forester	4.4%
Health professional (non-M.D.)	1.3%
Lawyer	1.5%
Military career	1.9%
Research scientist	0.6%
Skilled worker	11.0%
Semi-skilled worker	4.9%
Laborer (unskilled)	3.2%
Unemployed	2.1%
Other occupation	21.9%

Father's education:	
Grammar school or less	5.1%
Some high school	10.5%
High school graduate	29.2%
Postsecondary other than college	4.5%
Some college	13.4%
College degree	20.1%
Some graduate school	2.4%
Graduate degree	14.9%

Mother's religious preference:	
Jewish	3.3%
Protestant	38.1%
Roman Catholic	37.7%
Other	17.3%
None	3.6%

Mother's occupation:	
Artist (incl. performer)	1.3%
Businesswoman	9.8%
Business (clerical)	11.3%
Clergy or religious worker	0.1%
College teacher or admin.	0.3%
Doctor or dentist	0.2%
Educator (secondary)	3.2%
Educator (elementary)	5.8%
Engineer	0.1%
Farmer or forester	0.4%
Health professional (non-M.D.)	1.7%
Homemaker (full-time)	23.2%
Lawyer	0.1%
Nurse	7.5%
Research scientist	0.1%
Social, welfare, rec. worker	1.2%
Skilled worker	1.9%
Semi-skilled worker	3.5%
Laborer (unskilled)	2.3%
Unemployed	8.5%
Other occupation	17.4%

Mother's education:	
Grammar school or less	3.1%
Some high school	8.7%
High school graduate	41.7%
Postsecondary other than college	6.7%
Some college	14.5%
College degree	16.7%
Some graduate school	2.1%
Graduate degree	6.4%

Number of older brothers:	
None	44.2%
One	32.7%
Two	14.2%
Three or more	8.9%

Number of older sisters:	
None	45.7%
One	32.2%
Two	13.7%
Three or more	8.4%

Number of younger brothers:	
None	48.4%
One	36.8%
Two	11.2%
Three or more	3.6%

Number of younger sisters:	
None	49.9%
One	36.4%
Two	10.5%
Three or more	3.3%

Students estimate chances are very good that they will:	
Change major field	12.1%
Change career choice	11.5%
Fail one or more courses	1.7%
Graduate with honors	11.2%
Be elected to student office	2.8%
Get a job to pay college expenses	40.7%
Join a social fraternity or sorority	18.1%
Live in a coeducational dorm	28.8%
Be elected to an honor society	7.4%
Make at least a "B" average	40.6%
Need extra time to complete degree	5.6%
Need tutoring in some courses	9.8%
Work at outside job	23.4%
Seek vocational counseling	6.1%
Seek individual counseling	4.1%
Get a bachelor's degree	64.8%
Participate in student protests	3.7%
Drop out temporarily	1.3%
Drop out permanently	1.0%
Transfer to another college	11.1%
Be satisfied with college	55.8%
Find a job in a preferred field	70.8%
Marry while in college	5.1%
Marry within a year after college	17.2%

Number of other colleges applied to for admission this year:	
None	38.0%
One	18.0%
Two	17.2%
Three	13.3%
Four	6.6%
Five	3.4%
Six or more	3.6%

Number of other college acceptances this year:	
None	19.6%
One	30.8%
Two	24.3%
Three	14.8%
Four	6.1%
Five	2.3%
Six or more	2.1%

College attended is student's:	
First choice	74.5%
Second choice	19.4%
Third choice	4.2%
Less than third choice	1.8%

Distance from home to college:	
5 miles or less	9.1%
6-10 miles	10.5%
11-50 miles	25.1%
51-100 miles	16.6%
101-500 miles	30.8%
More than 500 miles	7.9%

Reasons noted as very important in deciding to go to college:	
Parents' wishes	32.5%
Could not find job	5.8%
Wanted to get away from home	9.5%
Able to get a better job	76.3%
Gain general education	67.4%
Improve reading-study skills	39.7%
Nothing better to do	2.3%
Become a more cultured person	33.5%
Able to make more money	67.0%
Learn more about things	73.3%
Meet new, interesting people	55.4%
Prepare for graduate school	45.4%

Reasons noted as very important in selecting college attended:	
Relatives' wishes	6.6%
Teacher's advice	4.1%
Good academic reputation	53.0%
Offered financial assistance	15.4%
Advice of former student	14.8%
Offers special programs	26.6%
Low tuition	17.7%
Advice of guidance counselor	7.6%
Wanted to live at home	10.5%
Friend's suggestion	7.2%
Recruited by college	4.6%
Not accepted elsewhere	2.7%

Highest degree planned at college attended:	
None	4.6%
Associate (or equiv.)	27.7%
Bachelor's (B.A., B.S.)	51.2%
Master's (M.A., M.S.)	10.6%
Ph.D. or Ed.D.	1.4%
M.D., D.O., D.D.S., or D.V.M.	1.3%
LL.B. or J.D.	0.9%
B.D. or M.Div.	0.3%
Other	1.9%

Highest degree planned anywhere:	
None	2.1%
Associate (or equiv.)	8.4%
Bachelor's (B.A., B.S.)	37.8%
Master's (M.A., M.S.)	31.0%
Ph.D. or Ed.D.	7.9%
M.D., D.O., D.D.S., or D.V.M.	5.9%
LL.B. or J.D.	4.0%
B.D. or M.Div.	0.5%
Other	2.3%

Probable field of study:	
Accounting	5.8%
Aeronautical engineering	1.2%
Agriculture	2.6%
Anthropology	0.1%
Architecture, urban planning	0.8%
Art, fine and applied	2.2%
Arts and humanities (misc.)	0.6%
Astronomy	0.1%
Atmospheric science	0.1%
Biochemistry or biophysics	0.4%
Biological sciences (misc.)	0.6%
Biology (general)	1.6%
Botany	0.1%
Building trades	0.3%
Business (misc.)	1.3%
Business admin. (general)	7.4%
Business education	0.2%
Chemical engineering	1.2%
Chemistry	0.8%
Civil engineering	1.1%
Communications	2.1%
Computer science	3.5%
Data-processing, computer programming	3.0%
Drafting or design	0.7%
Earth science	0.3%
Economics	0.4%
Education (misc.)	0.4%
Electrical or electronic engr.	3.6%
Electronics	0.8%
Elementary education	2.6%
Engineering (misc.)	2.0%
English	0.9%
Finance	0.7%
Foreign language	0.5%
Geography	0.0%
Health technology	1.6%
History	0.6%
Home economics	0.5%
Industrial engineering	0.5%
Forestry	0.9%
Journalism	1.6%
Law enforcement	1.1%
Library or archival science	0.0%
Management	4.2%
Marine science	0.2%
Marine-life science	0.4%
Marketing	1.9%
Mathematics	0.6%
Mechanical engineering	2.4%
Mechanics	0.6%
Microbiology or bacteriology	0.2%
Military science	0.1%
Music	1.3%
Music and art education	0.3%
Nursing	3.8%
Pharmacy	0.4%
Philosophy	0.1%
Physical education	1.5%
Physical sciences (misc.)	0.2%
Physics	0.4%
Political science	1.9%
Pre-dental, pre-medical, pre-veterinary	3.0%
Professional (misc.)	1.4%
Psychology	2.2%
Secondary education	0.7%
Secretarial studies	2.4%
Social work	1.1%
Social sciences (misc.)	0.2%
Sociology	0.3%
Special education	1.4%
Speech	0.1%
Statistics	0.0%
Theater and drama	0.7%
Theology and religion	0.3%
Therapy	1.8%
Zoology	0.4%
Other fields	1.3%
Other technical fields	0.6%
Undecided	4.7%

Probable career occupation:	
Accountant or actuary	5.5%
Actor or entertainer	0.9%
Architect or urban planner	1.3%
Artist	1.8%
Business (clerical)	2.1%
Business executive	10.2%
Business proprietor	2.8%
Business salesperson or buyer	1.1%
Clergy (minister or priest)	0.3%
Clergy (misc.)	0.2%
Clinical psychologist	0.9%
College teacher	0.2%
Computer programmer or analyst	6.9%
Conservationist or forester	1.3%
Dentist	0.7%
Dietitian or home economist	0.4%
Educator (elementary)	3.5%
Educator (secondary)	2.0%
Engineer	10.9%
Farmer or rancher	1.5%
Foreign service worker	0.5%
Homemaker (full-time)	0.2%
Interior decorator	0.5%
Interpreter	0.2%
Journalist or writer	2.2%
Lab technician or hygienist	1.2%
Law enforcement officer	0.9%
Lawyer or judge	3.9%
Military service	1.0%
Musician	1.2%
Nurse	3.9%
Optometrist	0.2%
Pharmacist	0.4%
Physician	3.4%
Research scientist	1.6%
School counselor	0.2%
School principal or superintendent	0.0%
Social, welfare, or rec. worker	1.5%
Statistician	0.1%
Therapist	2.1%

Continued on Following Page

FACT-FILE—Continued

Probable career occupation (continued):	
Veterinarian	1.2%
Skilled trades	1.7%
Other occupation	7.2%
Undecided	10.1%

Estimated parental income:	
Less than $4,000	3.3%
$4,000-$5,999	2.4%
$6,000-$7,999	2.7%
$8,000-$9,999	3.2%
$10,000-$12,499	6.1%
$12,500-$14,999	5.7%
$15,000-$19,999	10.5%
$20,000-$24,999	15.2%
$25,000-$29,999	11.5%
$30,000-$34,999	10.5%
$35,000-$39,999	7.9%
$40,000-$49,999	9.0%
$50,000-$99,999	9.2%
$100,000 or more	2.7%

Persons currently dependent on parents for support:	
One	5.4%
Two	10.0
Three	20.6%
Four	26.7%
Five	21.7%
Six or more	15.6%

Number of other dependents currently attending college:	
None	65.6%
One	24.9%
Two	6.8%
Three or more	2.7%

Concern about financing college:	
No concern	32.4%
Some concern	51.6%
Major concern	16.0%

Support from parental aid:	
None	30.8%

Support from parental aid: (continued):	
$1-$499	18.9%
$500-$999	10.5%
$1,000-$1,499	8.3%
$1,500-$2,000	7.5%
Over $2,000	24.0%

Support from spouse:	
None	99.1%
$1-$499	0.5%
$500-$999	0.2%
$1,000-$1,499	0.1%
$1,500-$2,000	0.1%
Over $2,000	0.2%

Support from Pell Grant:	
None	74.0%
$1-$499	8.6%
$500-$999	7.9%
$1,000-$1,499	5.1%
$1,500-$2,000	2.8%
Over $2,000	1.6%

Pell Grant:	
Heard of the program	64.2%
Applied for aid	42.7%
Qualified for aid	26.9%

Support from supplemental educational opportunity grant:	
None	94.3%
$1-$499	2.5%
$500-$999	1.8%
$1,000-$1,499	0.9%
$1,500-$2,000	0.4%
Over $2,000	0.1%

Support from state scholarship or grant:	
None	86.2%
$1-$499	6.7%
$500-$999	3.7%
$1,000-$1,499	1.9%
$1,500-$2,000	0.9%

Support from state scholarship or grant (continued):	
Over $2,000	0.6%

Support from college grant:	
None	88.6%
$1-$499	3.8%
$500-$999	2.7%
$1,000-$1,499	1.9%
$1,500-$2,000	1.1%
Over $2,000	1.9%

Support from college work-study grant:	
None	88.0%
$1-$499	4.3%
$500-$999	5.1%
$1,000-$1,499	2.2%
$1,500-$2,000	0.4%
Over $2,000	0.1%

Support from personal G.I. benefits:	
None	99.3%
$1-$499	0.2%
$500-$999	0.1%
$1,000-$1,499	0.1%
$1,500-$2,000	0.1%
Over $2,000	0.2%

Support from parent's G.I. benefits:	
None	99.0%
$1-$499	0.4%
$500-$999	0.2%
$1,000-$1,499	0.1%
$1,500-$2,000	0.1%
Over $2,000	0.2%

Support from other private grants:	
None	93.2%
$1-$499	3.3%
$500-$999	1.7%
$1,000-$1,499	0.9%
$1,500-$2,000	0.5%
Over $2,000	0.5%

Support from full-time employment:	
None	98.0%
$1-$499	0.9%
$500-$999	0.5%
$1,000-$1,499	0.2%
$1,500-$2,000	0.1%
Over $2,000	0.3%

Support from part-time employment:	
None	76.4%
$1-$499	15.7%
$500-$999	5.2%
$1,000-$1,499	1.6%
$1,500-$2,000	0.5%
Over $2,000	0.6%

Support from summer work:	
None	56.5%
$1-$499	21.9%
$500-$999	12.3%
$1,000-$1,499	5.7%
$1,500-$2,000	2.0%
Over $2,000	1.6%

Support from other savings:	
None	81.0%
$1-$499	11.8%
$500-$999	3.4%
$1,000-$1,499	1.7%
$1,500-$2,000	0.8%
Over $2,000	1.4%

Federal guaranteed student loan:	
Heard of program	43.8%
Applied for aid	20.9%
Qualified for aid	19.1%

Support from federal guaranteed student loan:	
None	73.7%
$1-$499	1.6%
$500-$999	2.3%
$1,000-$1,499	3.4%
$1,500-$2,000	4.7%

Support from federal guaranteed student loan:	
Over $2,000	14.4%

Support from college loan:	
None	96.3%
$1-$499	0.7%
$500-$999	0.7%
$1,000-$1,499	0.6%
$1,500-$2,000	0.5%
Over $2,000	1.0%

Support from national direct student loan:	
None	92.4%
$1-$499	1.6%
$500-$999	2.0%
$1,000-$1,499	1.5%
$1,500-$2,000	0.9%
Over $2,000	1.5%

Support from other loan:	
None	95.8%
$1-$499	0.6%
$500-$999	0.7%
$1,000-$1,499	0.7%
$1,500-$2,000	0.7%
Over $2,000	1.5%

Support from social security benefits:	
None	94.2%
$1-$499	2.5%
$500-$999	1.0%
$1,000-$1,499	0.8%
$1,500-$2,000	0.5%
Over $2,000	0.9%

Other sources of support:	
None	96.3%
$1-$499	1.5%
$500-$999	0.5%
$1,000-$1,499	0.3%
$1,500-$2,000	0.2%
Over $2,000	1.1%

Attitudes

	All institutions			2-year colleges		4-year colleges				Universities		Predominantly black colleges	
	Men	Women	Total	Public	Private	Public	Pvt., non-sectarian	Protestant	Catholic	Public	Private	Public	Private
Student's political views:													
Far left	1.9%	1.4%	1.6%	1.9%	2.2%	1.8%	1.6%	1.5%	1.3%	1.2%	1.3%	5.5%	3.3%
Liberal	18.1%	18.1%	18.1%	16.6%	15.1%	17.8%	22.2%	17.0%	17.4%	19.4%	23.8%	26.7%	30.7%
Middle-of-the-road	55.0%	64.0%	59.6%	64.2%	60.4%	60.1%	53.3%	53.2%	61.0%	57.1%	48.4%	45.6%	46.6%
Conservative	23.5%	15.9%	19.6%	16.1%	21.1%	19.4%	21.7%	27.2%	19.4%	21.5%	25.4%	17.0%	17.5%
Far right	1.6%	0.6%	1.1%	1.2%	1.1%	1.0%	1.2%	1.1%	0.9%	0.9%	1.1%	5.2%	1.9%
Student agrees strongly or somewhat that:													
Government isn't protecting consumer	65.7%	74.8%	70.4%	72.6%	75.0%	71.5%	69.8%	68.4%	69.2%	66.7%	62.3%	78.5%	79.2%
Government isn't controlling pollution	73.2%	81.8%	77.6%	77.5%	78.9%	78.2%	79.6%	77.2%	78.7%	76.1%	76.6%	77.8%	79.7%
Criminals have too many rights	74.2%	64.2%	69.1%	70.5%	67.9%	68.7%	67.3%	70.2%	67.3%	68.3%	66.7%	56.4%	55.8%
Money is needed to solve urban problems	46.5%	45.9%	46.2%	48.5%	49.1%	46.2%	45.7%	44.6%	46.9%	42.7%	43.2%	63.7%	64.3%
People should not obey laws that violate their beliefs	35.3%	30.0%	32.5%	35.4%	33.1%	31.3%	32.6%	31.5%	30.6%	29.3%	31.3%	41.1%	40.1%
Inflation is the country's biggest domestic problem	76.0%	81.3%	78.7%	81.6%	80.5%	79.4%	75.5%	76.4%	77.5%	76.3%	71.1%	81.5%	81.1%
The death penalty should be abolished	24.7%	35.2%	30.1%	29.7%	30.7%	29.6%	32.1%	30.7%	37.5%	28.2%	33.1%	51.4%	48.1%
Government should provide a national health care plan	51.7%	57.8%	54.8%	59.0%	57.8%	56.8%	53.6%	48.2%	55.8%	48.4%	45.9%	76.5%	70.9%
An energy shortage is causing a depression	79.8%	82.4%	81.2%	81.0%	80.8%	82.0%	82.1%	81.0%	80.3%	80.8%	79.4%	81.6%	83.3%
Abortion should be legalized	53.0%	54.7%	53.9%	53.8%	47.0%	55.2%	59.0%	41.9%	31.9%	58.9%	58.2%	56.5%	60.5%
Grading in high school is too easy	59.3%	56.1%	57.6%	55.5%	51.5%	56.4%	60.3%	61.5%	54.8%	60.9%	64.4%	38.4%	42.1%
Women's activities should be confined to the home	35.0%	19.3%	26.9%	30.0%	31.1%	27.0%	23.4%	30.5%	23.4%	22.7%	19.8%	44.4%	31.4%
Couples should live together before marriage	48.1%	37.7%	42.7%	48.2%	37.4%	40.8%	45.1%	26.7%	31.4%	42.2%	41.7%	47.3%	45.6%
Large families should be discouraged	47.1%	37.2%	42.0%	42.7%	39.7%	41.6%	42.7%	41.5%	27.3%	44.3%	42.0%	35.2%	29.3%
Divorce laws should be liberalized	47.3%	41.2%	44.2%	48.8%	43.8%	45.1%	43.4%	29.8%	32.0%	42.6%	39.2%	60.2%	56.2%
It is all right for people who like each other to have sex	62.8%	32.2%	47.0%	51.9%	38.0%	46.0%	48.3%	29.3%	32.5%	49.0%	46.3%	50.2%	48.2%
Women should have job equality	88.6%	96.6%	92.7%	91.0%	90.6%	93.4%	94.2%	92.7%	93.9%	94.3%	95.3%	87.7%	92.0%
The wealthy should pay a larger share of taxes	71.3%	70.8%	71.0%	74.0%	70.8%	73.1%	67.8%	69.8%	69.5%	67.9%	60.2%	74.7%	79.1%
Marijuana should be legalized	36.3%	31.9%	34.0%	37.2%	29.8%	32.7%	34.9%	21.4%	26.9%	35.4%	33.5%	37.9%	35.8%
It is all right to bus to achieve balance	40.8%	46.7%	43.8%	48.1%	50.7%	45.8%	43.5%	40.2%	42.7%	34.9%	37.2%	73.8%	71.3%
Homosexual relations should be prohibited	57.8%	39.9%	48.6%	52.3%	56.5%	50.2%	41.1%	55.9%	42.7%	43.4%	34.1%	56.8%	48.7%
College has the right to regulate off-campus behavior	16.3%	13.7%	14.9%	16.2%	19.8%	15.4%	13.6%	20.4%	12.4%	11.0%	11.5%	36.2%	25.7%
Students should help evaluate faculty	70.1%	70.3%	70.2%	68.5%	66.5%	69.8%	72.1%	70.4%	70.1%	73.2%	74.0%	64.9%	64.2%
College grades should be abolished	17.4%	13.2%	15.3%	17.6%	16.3%	14.8%	14.2%	13.7%	14.0%	12.9%	12.6%	31.5%	19.4%
Student publications should be regulated	40.0%	42.9%	41.5%	45.3%	51.5%	42.9%	37.1%	48.4%	40.9%	33.7%	28.0%	63.6%	54.5%
Objectives student considers essential or very important:													
Achieving in a performing art	10.2%	12.7%	11.5%	9.1%	12.9%	12.6%	13.9%	14.3%	11.0%	11.6%	15.2%	19.5%	15.3%
Becoming an authority in his field	74.5%	71.4%	72.9%	69.8%	70.2%	74.6%	73.9%	71.4%	72.1%	77.0%	75.9%	75.4%	84.0%
Obtaining recognition from colleagues	56.3%	53.1%	54.6%	52.0%	52.4%	55.7%	56.4%	49.5%	55.4%	58.4%	59.6%	62.0%	68.1%
Influencing the political structure	18.5%	11.8%	15.0%	12.6%	13.1%	15.1%	18.1%	15.8%	16.6%	16.5%	21.4%	27.2%	30.3%
Influencing social values	29.0%	33.9%	31.6%	28.8%	34.8%	32.5%	33.4%	39.3%	35.9%	30.4%	33.3%	41.4%	48.8%
Raising a family	66.3%	66.7%	66.5%	64.2%	68.4%	66.5%	66.4%	71.5%	73.1%	66.8%	68.8%	57.0%	64.5%
Having administrative responsibility	41.5%	38.0%	39.7%	40.1%	38.9%	41.2%	35.9%	34.8%	39.2%	41.1%	38.2%	51.1%	51.1%
Being very well-off financially	70.5%	60.2%	65.2%	67.6%	62.6%	64.5%	63.6%	52.9%	60.1%	67.7%	63.7%	75.8%	80.3%
Helping others who are in difficulty	54.3%	71.0%	62.9%	58.6%	67.1%	65.2%	65.2%	69.8%	71.4%	61.9%	66.7%	69.9%	77.3%
Making a theoretical contribution to science	18.0%	11.0%	14.4%	13.2%	10.2%	13.3%	16.8%	12.0%	13.7%	17.0%	21.0%	21.3%	27.3%
Writing original works	11.0%	12.5%	11.8%	9.5%	12.5%	12.4%	14.6%	13.0%	12.3%	12.5%	16.3%	17.4%	18.1%
Creating an artistic work	10.9%	14.8%	13.0%	11.7%	16.8%	13.1%	16.3%	12.6%	12.0%	13.2%	12.9%	20.9%	17.3%
Being successful in his own business	55.0%	44.1%	49.4%	50.2%	53.5%	47.7%	50.7%	46.0%	46.1%	50.1%	48.4%	65.7%	68.1%
Helping to clean up environment	27.0%	22.7%	24.8%	25.3%	25.4%	24.4%	27.3%	24.0%	22.8%	24.0%	23.7%	37.2%	36.0%
Developing a philosophy of life	47.5%	50.4%	49.0%	42.4%	49.6%	49.9%	55.2%	57.0%	56.2%	51.6%	58.7%	57.9%	65.5%
Participating in community action	22.0%	26.1%	24.1%	20.6%	27.3%	25.8%	26.1%	27.4%	28.3%	24.6%	26.8%	40.8%	45.8%
Promoting racial understanding	28.7%	33.2%	31.0%	26.7%	33.4%	33.3%	37.1%	35.5%	35.1%	29.6%	36.6%	58.8%	72.5%
Keeping up with political affairs	44.9%	33.9%	39.2%	31.3%	31.9%	39.2%	47.0%	41.8%	44.3%	46.1%	57.0%	45.4%	54.1%

SOURCE: "THE AMERICAN FRESHMAN: NATIONAL NORMS FOR FALL, 1981," BY ALEXANDER W. ASTIN, PUBLISHED BY AMERICAN COUNCIL ON EDUCATION AND UNIVERSITY OF CALIFORNIA AT LOS ANGELES

FACT-FILE

How the 50 States Rank

1. By high-school graduates per 1,000 population
2. By students in public colleges per 1980 high-school graduate
3. By estimated tuition per public-college student
4. By tuition per $100 of appropriations for higher education

	1 High-school graduates per 1,000 population (a)		2 Public-college enrollment per high-school graduate (b)		3 Tuition per public-college student (c)		4 Public-college tuition per $100 appropriation (d)	
	Number	Rank	Number	Rank	Amount	Rank	Amount	Rank
Alabama	16.1	27	1.91	19	$ 945	26	$27	23
Alaska	19.9	2	1.21	49	1,525	6	12	48
Arizona	14.9	45	2.92	2	958	24	30	17
Arkansas	16.0	32	1.46	40	757	40	22	34
California	12.3	50	3.17	1	409	50	10	50
Colorado	16.3	25	2.32	5	1,667	5	58	5
Connecticut	17.0	17	1.27	45	850	35	22	35
Delaware	19.2	4	2.02	14	1,909	4	61	4
Florida	13.2	49	1.74	27	816	37	23	32
Georgia	15.3	44	1.34	43	988	21	22	37
Hawaii	15.9	35	2.16	9	559	47	12	49
Idaho	15.6	37	1.81	22	553	48	15	47
Illinois	15.4	41	1.77	25	882	32	24	29
Indiana	16.4	23	1.59	32	1,351	10	40	10
Iowa	18.3	10	1.55	37	1,066	17	26	25
Kansas	17.0	16	2.18	8	897	30	25	27
Kentucky	16.6	21	1.47	39	835	36	21	38
Louisiana	16.0	34	1.67	29	924	28	23	31
Maine	17.8	12	1.22	48	1,415	9	48	7
Maryland	16.7	20	1.80	23	1,454	7	43	9
Massachusetts	17.0	18	1.32	44	525	49	19	41
Michigan	16.5	22	2.04	11	1,287	11	43	8
Minnesota	19.0	6	1.57	34	1,258	13	30	19
Mississippi	15.3	43	1.98	16	1,068	16	26	26
Missouri	16.2	26	1.56	36	812	38	27	21
Montana	19.6	3	1.71	28	879	33	27	22
Nebraska	18.6	8	1.87	21	981	22	26	24
Nevada	13.6	48	1.93	18	725	41	23	33
New Hampshire	17.5	13	1.26	46	2,020	3	104	2
New Jersey	17.2	15	1.26	47	1,090	15	34	13
New Mexico	20.2	1	1.56	35	950	25	22	36
New York	16.1	28	1.45	42	1,438	8	30	18
North Carolina	15.4	40	1.98	15	665	44	16	44
North Dakota	18.2	11	2.36	4	934	27	24	30
Ohio	16.0	29	1.60	31	1,286	12	50	6
Oklahoma	15.4	42	2.08	10	715	42	21	39
Oregon	16.0	33	2.26	7	1,029	18	31	14
Pennsylvania	16.9	19	1.13	50	2,276	2	63	3
Rhode Island	17.3	14	1.51	38	1,245	14	36	11
South Carolina	15.6	36	1.78	24	781	39	19	42
South Dakota	18.9	7	1.57	33	891	31	35	12
Tennessee	14.4	46	1.77	26	856	34	28	20
Texas	16.0	30	1.98	17	697	43	16	45
Utah	14.3	47	2.31	6	902	29	25	28
Vermont	19.0	5	1.46	41	3,893	1	162	1
Virginia	15.5	38	2.03	12	971	23	30	16
Washington	15.4	39	2.36	3	629	46	19	40
West Virginia	16.0	31	1.64	30	636	45	17	43
Wisconsin	18.4	9	2.03	13	994	19	30	15
Wyoming	16.4	24	1.89	20	991	20	15	46
Total U. S.	**15.7**		**1.84**		**$ 957**		**$26**	

(a) Number of high-school graduates in spring, 1980, per 1,000 population.

(b) Enrollment of full-time-equivalent students in public colleges and universities, fall, 1980, divided by number of high-school graduates in spring, 1980.

(c) Estimated tuition revenue of public colleges and universities per full-time-equivalent student in 1981-82, based on 1979-80 ratio of tuition to appropriations applied to 1981-82 appropriations.

(d) Estimated tuition revenue of public colleges and universities per $100 of state and local appropriations for public higher education based on 1979-80 ratio.

SOURCE: D. KENT HALSTEAD, NATIONAL INSTITUTE OF EDUCATION

Fees at Public Colleges Average $957 this Year

WASHINGTON

Tuition collected by public colleges and universities will average $957 per student this year, according to estimates by D. Kent Halstead, a senior research associate at the National Institute of Education.

As with other elements in the financing of public higher education, the estimated tuition per student (shown in the table above) varies widely from state to state—from a high of $3,893 in Vermont to a low of $409 in California.

For every $100 appropriated for public higher education in Vermont, the public institutions collect $162 in tuition, Mr. Halstead reported, while California's state appropriations are 10 times larger than tuition revenue.

The study notes that the number of high-school graduates per 1,000 population varies from 20.2 in New Mexico to 12.3 in California. For every 100 people who graduated from high school in California in 1980, there are 317 students enrolled in public colleges and universities, compared with a ratio of 113 per 100 in Pennsylvania.

Because of data-reporting errors, tuition per student is overstated to some extent for Alabama, Minnesota, Mississippi, and Washington. Appropriations per student, reported in *The Chronicle*, February 10, also were overstated for those states for the same reason. Corrected figures will be included in a later table showing appropriations and tuition per student, adjusted for inflation and types of higher-education systems.

Copies of the Halstead report will be available after March 1 for $5.14 each ($1.11 each in microfiche) from the Educational Resources Information Center, Document Reproduction Service, Box 190, Arlington, Va. 22210.

—JACK MAGARRELL

Colloquium for
Academic Administrators
American Council on Education

THE FINANCIAL RESPONSIBILITIES OF ACADEMIC OFFICERS: LIMITS, POSSIBILITIES, AND OPPORTUNITIES

April 6-8, 1982
Hilton Hotel of Philadelphia
Philadelphia, Pennsylvania

This Colloquium for Academic Administrators is offered by the American Council on Education in cooperation with the University of Pennsylvania's Higher Education Finance Research Institute and the Wharton School.

It will deal with the role and responsibilities of academic leaders as financial managers. Its objectives are to help academic officers understand how the management of financial resources can be used in pursuit of academic goals and to improve their understanding of the internal and external constraints that academic administrators must face.

A principal faculty of five will work with participants in small group sessions and in lecture/discussion sessions. The lecture/discussion sessions will deal with general topics and information such as the budget process, external constraints in financial planning, and resource allocation. The working sessions will explore these topics and others in depth, and will enable the participants to work closely with a variety of experienced financial planners and to be exposed to their different personal and institutional perspectives. The principal faculty will be supplemented by resource persons with expertise in financial modeling and with experience in various types of institutions.

The General Services Foundation has recently awarded a grant to the American Council on Education to provide limited financial assistance to Colloquium participants from private institutions. Women and minorities are especially encouraged to apply for these grants.

Registration fees: $350, single registrant from ACE member institution; $425, single registrant from nonmember institution. Special reduced team fees are also offered.

For materials and information: American Council on Education, Attention: Colloquium for Academic Administrators, One Dupont Circle, Washington, D.C. 20036 or call 202/833-4780.

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BEAVER COLLEGE
Glenside, PA 19038
215/884-3500, Extension 320, 387

APPLICATION DEADLINE DATE: APRIL 2, 1982

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A 6-Month Index to the Chronicle Begins on Page 61

THE CHRONICLE
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News Summary

Articles on inside pages

Science requirements in colleges and universities have been lowered to an "alarming point," a report from the National Research Council charges. Story on Page 6.

Nebraska's state system of higher education is the costliest in the country, according to an analysis by D. Kent Halstead. Story on Page 8.

Private universities will be hit especially hard by cutbacks in federal support for higher education, says a study from the University of California at Los Angeles. Story on Page 9.

Universities could lose up to $3-million under a plan to reimburse them for only 90 per cent of the indirect costs they incur in administering grants from the National Institutes of Health. Story on Page 11.

Fulbright fellowships would get more money and other international-education programs would get less, under the Reagan Administration's proposed budget. Story on Page 11.

Congress may restore some of the cuts in federal student-aid and science-education programs proposed in the Reagan budget for fiscal 1983. Stories on Page 12

The Swain School of Design is in turmoil over the forced resignation of a popular president. Story on Page 5.

Sixteen prominent mathematicians in Poland have been reported arrested as the country enters its third month under martial law. Story on Page 17.

How much should authors of oral histories edit their subjects' remarks, and what should they reveal about the interviews? Story on Page 19.

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American Scholarship on Soviet Called Dangerously Inadequate

Report cites diminished interest in Eastern Europe among U.S. academics

By MALCOLM G. SCULLY

NEW YORK

> *"The Soviet Union probably has 3 times as many academic specialists working on U.S. foreign policy as we have working on Soviet foreign policy."*

Research and scholarship on the Soviet Union and Eastern Europe are so badly on the decline in this country that U.S. foreign policy and national security could be seriously undermined, according to a report by the International Research & Exchanges Board here.

While American scholars' interest in Soviet affairs and foreign policy has been diminishing over the past decade, the Soviet effort in such fields has expanded dramatically, the report suggests.

It includes three papers that, taken together, compare recent developments in American scholarship with developments over the past 25 years in the Soviet Union.

In one paper, Walter D. Connor, director of Soviet and East European studies at the Foreign Service Institute and a visiting professor at the University of Virginia, says that the volume and quality of American work on the Soviet bloc rose from the late 1950's until about 1970 but has been declining since.

"The effect, against a backdrop of turbulence in Eastern Europe, growing Soviet power, and penetration into new regions, is a growing inadequacy of the American Soviet and East European enterprise," Mr. Connor says.

The number of U.S. specialists in those areas could be sharply reduced by the retirement of older reseachers during the 1980's, he adds.

Mr. Connor cites one recent estimate that only about 1,100 scholars in universities, government, and private organizations are now working on the Soviet Union and Eastern Europe. According to the most conservative estimate, he says, the United States needs at least 1,700 people in those fields.

The biggest gaps are in economics, the politics of Eastern Europe, sociology, and studies of the various nationalities that make up the Soviet Union, he says.

'Serious Depletion of Expertise'

In a second paper, Robert Legvold, director of a project on the Soviet Union at the Council on Foreign Relations, says the United States "now suffers from a serious depletion of expertise on Soviet foreign policy" in both the government and the universities.

"Were we to search the country's universities and research organizations, we would not find a single person who has studied closely the last 10 years of Soviet policy in Southern Africa, toward NATO, or even on the evolution of international economic relations," Mr. Legvold says. "The gaps in our knowledge are tremendous."

For the last decade, he adds, those gaps have been growing. "Far from having kept pace with change in Soviet policy toward traditional areas of concern, let alone having addressed new subjects of importance, research in this country has fallen far behind.

"Each year over the last decade the number of systematic foreign-policy studies has dwindled."

Specifically, Mr. Legvold reports, "we have had no major study of the evolution of Soviet policy toward SALT [the Strategic Arms Limitation Treaty] since the process began 12 years ago; no major study of the Sino-Soviet conflict since the late 1960's; no significant study of Soviet policy in Africa in the 1970's; and, most amazingly, no even moderately ambitious study of Soviet policy toward the United States over the last decade."

The lack of "carefully researched studies," he says, has meant that "our view of the Soviet Union is shaped increasingly by

Continued on Page 9, Column 1

Colleges' Retirement-Law Waiver Ends July 1

Unless Congress renews it, professors may teach till 70; most say they want to do so

By BEVERLY T. WATKINS

WASHINGTON

Many older faculty members who might otherwise retire will continue to teach for up to five more years if Congress does not renew a special exemption from the federal retirement law before July 1.

Without the exemption, which has permitted colleges to require tenured faculty members to retire at 65 rather than at 70, the average retirement age for professors would increase by about 1½ years—from about 65½ to 67—according to a new report from the U.S. Department of Labor.

More than 70 per cent of faculty members over age 50 are opposed to continuing the exemption, a Labor Department survey indicated. About 60 per cent said they favored having no mandatory retirement age at all.

With larger numbers of older, more highly paid faculty members continuing to teach, the report estimated that the cost to colleges and universities would rise by an average of 3 per cent between 1982 and 1987 and, in some cases, by as much as 7 or 8 per cent

25 Pct. Fewer New Jobs

The number of positions available for new faculty members would decrease by about 25 per cent during the same period, the report says.

The exemption, which Congress granted to colleges and universities in 1978 when it amended the Age Discrimination in Employment Act to raise the mandatory retirement age from 65 to 70, will expire July 1 unless the lawmakers extend it or make it permanent. After that date, no tenured faculty member in a public or private institution of higher education would have to retire before age 70.

Selected findings from the interim report, prepared at the request of Congress, were presented by Betty H. Roberts at a meeting here of the Association for Gerontology in Higher Education. Ms. Roberts, an associate professor of social service on leave from the University of New Hampshire, has worked on the report at the Labor Department for the last 1½ years.

In addition to reconsidering the faculty

Continued on Page 10, Column 1

Nebraska Tops States in Costs Per Student, Halstead Index Shows

WASHINGTON

The country's most expensive state system of higher education is Nebraska's, according to a "system cost index" developed by D. Kent Halstead, senior research associate at the National Institute for Education.

Costs per student in Nebraska can be expected to run about 35 per cent above the national average, according to Mr. Halstead's calculations, because a relatively large number of the state's students are enrolled in research universities and relatively few in two-year academic programs.

Some 39 per cent of Nebraska's public-college students are enrolled in the most expensive type of institution—research universities with dental, medical, osteopathic, or veterinary programs. For the country as a whole, only 12 per cent of public-college students are enrolled in such institutions.

At the lower end of the cost scale, two-year colleges offering primarily academic programs enrolled only 8 per cent of Nebraska's students, compared with a national average of nearly 30 per cent.

Based on the percentages of students enrolled in research universities, community colleges, and other types of institutions, Mr. Halstead's index shows that Nebraska's mixture of colleges and universities is 35 per cent more expensive than the national average.

That means Nebraska would have to spend 35 per cent more than the national average just to provide average support for students in each type of institution.

Mr. Halstead's analysis of support for public colleges and universities shows state and local appropriations in Nebraska amount to $3,773 per student this year. The national average is $3,646.

When the figure is adjusted according to the "system price index" to reflect the more expensive mix of institutions in the state, Nebraska's appropriations per student are reduced to $2,801.

The adjustment reduces Nebraska's national ranking in appropriations per student from seventeenth to forty-fourth.

The second most expensive higher-education system, according to the Halstead formula, is Iowa's, with a cost index 20 per cent above the national average.

In Iowa, 55 per cent of the public-college students are enrolled in research universities with dental, medical, osteopathic, or veterinary schools.

Compared with Nebraska, Iowa has a larger share—18 per cent—of its students in low-cost two-year academic programs.

The adjustment for system cost lowers Iowa's ranking in appropriations per student from tenth to twenty-fourth.

The least expensive system, the index indicates, is Alaska's, at 77.5 per cent of the national average. In Alaska, 44 per cent of the public enrollment is in two-year academic programs and none of it in research universities.

In a table of data from the Halstead study published in *The Chronicle* on February 10, unadjusted appropriations per student were accompanied by rankings for adjusted amounts. Corrected rankings and some revised amounts are included in the table on this page.

In a forthcoming issue *The Chronicle* will publish Mr. Halstead's data on the distribution of each state's enrollment among 10 types of public colleges and universities.

—JACK MAGARRELL

Notes

Note: The amounts and rankings shown for appropriations per student correct those published in *The Chronicle*, February 10.

(a) Based on national average appropriations for support of each of 10 different types of higher-education institution, applied to each state's distribution of total public enrollment among the 10 types. The index is intended to reflect variations in financial requirements of research universities, for example, and community colleges. Computed by the National Center for Higher Education Management Systems from financial and enrollment data from the National Center for Education Statistics.

(b) Appropriations for 1981-82 divided by full-time-equivalent enrollment for fall, 1980. Enrollment data are from the National Center for Education Statistics; state appropriations data from M. M. Chambers, Illinois State University; local appropriations data from the Council for Postsecondary Education, State of Washington.

(c) State and local appropriations per student adjusted for system costs (Column 2 divided by Column 1).

(d) Change in appropriations per student from 1979-80 to 1981-82, adjusted for inflation, estimated at 20-per-cent for the two-year period.

Private-College Bargaining Rule Turned Down by Kansas Board

TOPEKA, KAN.

The Supreme Court's decision on the status of faculty members at a private university does not apply to a public institution, according to a recent ruling by the Kansas Public Employee Relations Board.

In a 3-to-1 opinion, the board said that, because of certain "differences" between the public and private sectors, Wichita State University could not rely on the decision in *National Labor Relations Board* v. *Yeshiva University* to support its contention that faculty members are managers or supervisors.

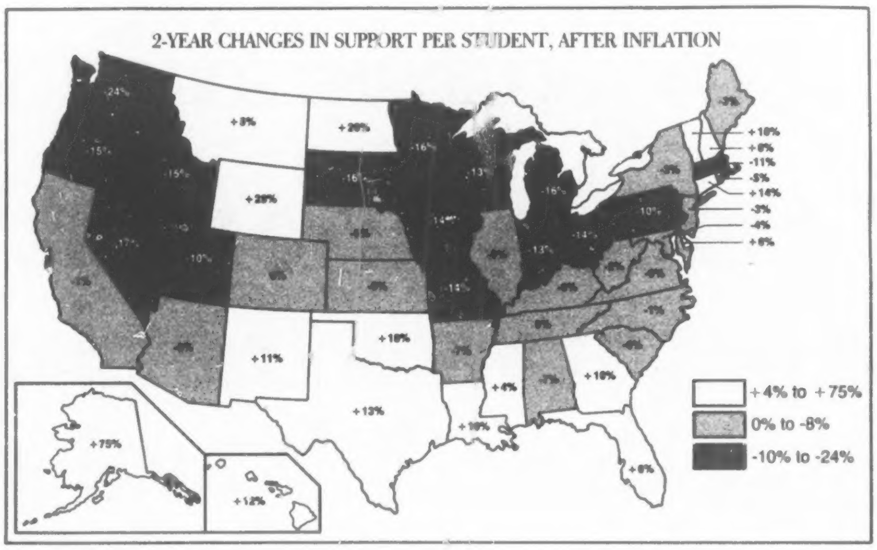
In *Yeshiva*, the Court ruled that faculty members at the private Hebrew institution in New York were "managerial employees" and, therefore, could not bargain collectively under federal labor law covering the private sector.

In a board hearing on a proposed faculty collective-bargaining unit, Wichita State University cited the *Yeshiva* decision in support of its argument that its faculty members could not bargain at all, because they were "management officials" or "supervisory employees" under Kansas state law, and were "in a governing position" at the university.

"In this case, we have a public institution with strong statutory power in the board of regents," said the board. Kansas law clearly defines "management official" and "supervisory employee," and faculty members at Wichita State do not fit those definitions, according to the board.

—BEVERLY T. WATKINS

FACT-FILE



CHRONICLE MAP BY PETER H. STAFFORD

SOURCE: D. KENT HALSTEAD, NATIONAL INSTITUTE OF EDUCATION

How the 50 States Rank

1. By relative cost of higher-education systems
2. By appropriations per student
3. By appropriations per student, adjusted for system costs
4. By 2-year change in appropriations per student, adjusted for inflation

	1		2		3		4	
	System cost		1981-82 state and local appropriations per student (b)		Adjusted for system cost (c)		2-year change adjusted for inflation (d)	
	Index (a)	Rank	Amount	Rank	Amount	Rank	Per cent	Rank
Alabama	100.6	28	$ 3,205	36	$ 3,186	31	− 7%	33
Alaska	77.5	50	12,712	1	16,403	1	+75%	1
Arizona	96.6	34	3,193	37	3,305	27	− 5%	26
Arkansas	112.1	8	3,441	26	3,070	35	− 7%	33
California	85.2	48	4,087	11	4,797	4	− 1%	19
Colorado	111.3	12	2,874	44	2,582	47	0%	17
Connecticut	91.9	43	3,862	15	4,202	6	+14%	5
Delaware	96.7	33	3,129	39	3,236	30	+ 6%	12
Florida	89.6	45	3,547	24	3,959	12	+ 6%	12
Georgia	112.0	10	4,492	5	4,011	11	+10%	9
Hawaii	116.2	5	4,662	4	4,012	10	+12%	7
Idaho	90.2	44	3,643	20	4,039	8	−15%	44
Illinois	101.4	25	3,676	19	3,625	19	− 6%	28
Indiana	107.5	18	3,377	29	3,141	33	−13%	39
Iowa	120.2	2	4,101	10	3,412	24	−14%	41
Kansas	114.6	6	3,587	23	3,130	34	− 6%	28
Kentucky	107.0	19	3,975	13	3,715	17	− 8%	35
Louisiana	111.0	13	4,017	12	3,619	20	+10%	9
Maine	95.4	38	2,886	43	3,025	38	− 3%	22
Maryland	113.2	7	3,383	28	2,989	39	− 4%	25
Massachusetts	87.0	47	2,764	45	3,177	32	−11%	38
Michigan	101.9	23	2,993	42	2,937	41	−16%	46
Minnesota	112.1	8	3,330	30	2,971	40	−16%	46
Mississippi	104.3	20	3,842	16	3,684	18	+ 4%	16
Missouri	98.4	30	3,008	41	3,057	36	−14%	41
Montana	92.2	42	3,257	33	3,533	22	+ 5%	15
Nebraska	134.7	1	3,773	17	2,801	44	− 6%	28
Nevada	80.7	49	3,154	38	3,908	13	−17%	49
New Hampshire	95.8	37	1,943	50	2,028	50	+ 6%	12
New Jersey	95.2	39	3,207	35	3,369	26	− 3%	22
New Mexico	111.5	11	4,320	7	3,874	14	+11%	8
New York	94.4	41	4,795	[illegible]	5,079	3	− 3%	22
North Carolina	94.5	40	4,156	8	4,398	5	− 1%	19
North Dakota	96.4	35	3,890	14	4,035	9	+20%	3
Ohio	108.8	16	2,745	46	2,523	48	−14%	41
Oklahoma	116.5	4	3,406	27	2,924	42	+18%	4
Oregon	102.5	22	3,320	31	3,239	29	−15%	44
Pennsylvania	100.8	26	3,613	21	3,584	21	−10%	36
Rhode Island	100.1	29	3,458	25	3,455	23	− 5%	26
South Carolina	109.8	14	4,112	9	3,745	15	− 6%	28
South Dakota	98.1	32	2,545	48	2,594	46	−16%	46
Tennessee	108.7	17	3,059	40	2,814	43	0%	17
Texas	104.3	20	4,354	6	4,174	7	+13%	6
Utah	119.0	3	3,609	22	3,033	37	−10%	36
Vermont	109.0	15	2,403	49	2,205	49	+10%	9
Virginia	95.9	36	3,237	34	3,375	25	− 6%	28
Washington	98.2	31	2,710	47	2,760	45	−24%	50
West Virginia	100.7	27	3,742	18	3,716	16	− 2%	21
Wisconsin	101.7	24	3,314	32	3,259	28	−13%	39
Wyoming	87.5	46	6,608	2	7,552	2	+28%	2
U. S. average	100		$ 3,646		$ 3,646		− 4%	

SOURCE: D. KENT HALSTEAD, NATIONAL INSTITUTE OF EDUCATION

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Federal Cuts May Prove Especially Painful for Private Universities

By JACK MAGARRELL

Reductions in federal support for higher education may hit private universities doubly hard, according to a study from the University of California at Los Angeles.

First, private universities are more dependent upon federal funds than public universities.

Second, private universities may face increasing competition from public universities for private support.

"As public sources of funding decline, for public as well as private institutions, private funding becomes increasingly important for the growth and survival of these institutions," say the authors of the study, Pamela S. Tolbert, a graduate student in sociology, and James Henson, a staff member of Graduate Information Services at U.C.L.A.

Their report, *Patterns of Funding in Public and Private Higher Education*, points up the increasing similarity of public and private universities in terms of where they get their money.

The publicly supported University of Michigan received 31 per cent of its support in 1978-79 from private sources, while Stanford University, which is private, received 54 per cent of its support from the government. Another private institution, the California Institute of Technology, received 62.5 per cent of its revenues from the government in 1978-79.

Some research universities will benefit from increased federal spending for military research, but both public and private institutions are trying to increase their revenues from private sources.

In the four-year period from 1974-75 to 1978-79, public universities increased the total amount of their revenue from private gifts and grants by 49 per cent, compared with a 41-per-cent increase at private universities.

Private grants and gifts still provide only about 4 per cent of the revenue of public universities, compared with about 12 per cent at private universities.

"Although the overall proportion of revenues derived from the private sector is relatively small among these public universities," the U.C.L.A. report says, "this is becoming an increasingly more important source of funding for them."

In the same four years, private universities increased their tuition revenue per student by 85 per cent, while the increase at public universities averaged 53 per cent.

The U.C.L.A. study of revenue sources at research universities found that private sources had increased most sharply at the public institutions in the four years, while government support had increased most sharply at the private institutions.

Among private research universities, total revenue per student increased by 51 per cent, compared with 41 per cent at public research universities, the study found.

Support per student from private funds during the four-year period increased 72 per cent at public research universities and 55 per cent at private research universities. The bigger increase in the private universities' total revenue was due to money from the government, which, on a per-student basis, increased 59 per cent at the private institutions, compared with 46 per cent at public institutions.

The recent downward trend in federal support of higher education reversed a 30-year trend of increasing reliance on such funds by both private and public institutions, the U.C.L.A. report says.

In 1939-40, private colleges and universities received only 4 per cent of their money from government sources—and three-fourths of that from state and local governments.

By 1967-68, public support of the private institutions, including student aid from public sources, had increased to 34.5 per cent—nearly all of it from the federal government.

In the same 28-year period, the private institutions' support from endowment and private gifts and grants dropped from 39 per cent to 19 per cent.

Between 1939-40 and 1967-68, public colleges and universities shifted slightly toward heavier reliance on federal funds for financial support—up from 13.5 per cent to 22.6 per cent. That was balanced by a decline in the share of support from tuition and fees—down from 20.3 per cent to 14.7 per cent.

Following are the percentages of revenue from government and private sources reported for private and public universities:

Private universities

Source	1974-75	1978-79
Government		
Federal	23.0%	21.3%
State	3.1%	2.8%
Total	26.6%	24.8%
Private		
Tuition and fees	54.1%	55.4%
Gifts and grants	11.8%	11.9%
Endowment	7.6%	7.9%
Total	73.4%	75.2%

Public universities

Source	1974-75	1978-79
Government		
Federal	19.8%	18.8%
State	56.1%	58.0%
Total	76.9%	77.1%
Private		
Tuition and fees	17.8%	17.6%
Gifts and grants	4.3%	4.2%
Endowment	1.0%	1.0%
Total	23.1%	22.8%

U.S.S.R. Studies

Continued from Page 1

popular impressions, *a priori* analyses, built from superficial reflections on the Soviet actions that most catch the eye, and by traditional habits of thought.

"The criticism is truer of Congress, the business and other professional communities, the media, and the public at large, but even in the classroom and the specialized agencies of government the decline in scholarship leaves its mark."

Frequently, Mr. Legvold says, "courses on contemporary Soviet policy are taught from the works of international-affairs generalists or specialists in other areas. Increasingly, government analysts carry on without a literature to enrich analysis or give perspective to daily concerns."

U.S. universities, he adds, are not preparing the new scholars needed to expand the number of experts on Soviet foreign policy and to replace the retiring older specialists in the field.

In recent years, the number of Ph.D.'s awarded by all American universities in some aspect of Soviet foreign policy has averaged only eight a year, he notes.

"To the extent that tomorrow's leadership in the study of Soviet foreign policy depends on today's Ph.D.'s, the future is not encouraging," he says.

Mr. Legvold adds that American specialists on Soviet foreign policy generally have not taken advantage of new opportunities to interview Soviet officials or to conduct "field research" in the Soviet Union.

Persistence Required

"The day has not arrived when an American scholar can walk into the Soviet Foreign Ministry and expect to meet with the foreign minister or reach the aides of the Soviet leadership, or contact senior Soviet military personnel within the general staff," Mr. Legvold writes.

Even so, he notes, if they are persistent, scholars can now speak with senior political commentators, university faculty members and other researchers, and middle-level officials at the Ministry of Foreign Affairs.

"The process, however, is slow and encumbered and for the moment the returns are limited. Nevertheless, the point is that not much is being done to make the most of existing opportunities," Mr. Legvold says. "For all the obstacles facing the study of Soviet foreign policy, Soviet specialists in this country are not beginning to do what they could."

While American research on Soviet foreign policy has been dwindling, Mr. Legvold reports that Soviet research on American policy has been expanding dramatically. "I do not mean to imply that they have solved the problem of expertise and we have not," he adds. "In many respects Soviet area studies remain exceedingly thin and rudimentary, overconcentrated in one or two institutes, and decidedly uneven in quality."

However, he says, Soviet research appears to be ahead of American research in at least three respects:

▶ "As a rough guess, the Soviet Union probably has three times as many academic specialists working on U.S. foreign policy as we have working on Soviet foreign policy."

▶ "In terms of distribution, the Soviet Union has a far superior coverage of subjects where American studies of Soviet foreign policy tend to be without any order and marked by enormous gaps."

▶ "In terms of dynamism, in the Soviet Union international-affairs studies, in general, and area studies, in particular, are thriving, while here they are marking time at best, and probably losing ground."

7,400 Specialists in Moscow

In the third paper in the report, Daniel C. Matuszewski, associate director of the International Research & Exchanges Board, argues that while much of the Soviet effort to study international relations may still be shaped by ideological goals, it has grown dramatically and become increasingly sophisticated in recent years.

"Over the course of the last 25 years," Mr. Matuszewski says, "the Soviet Academy of Sciences has put in place a network of institutes designed to carry out comprehensive data collection and assessment essential to policy formation in international relations.

"There are over 7,400 specialists working in 12 key Moscow institutes alone."

The "intensity and quality of this unique enterprise," Mr. Matuszewski says, "can no longer be ignored by either the Western scholar or the Western political analyst."

The board, known as IREX, is a nonprofit organization that administers U.S. exchanges with the Soviet Union and Eastern Europe in the humanities and social sciences. Copies of its report—*Foreign Area Research in the National Interest: American & Soviet Perspectives*—are available for $5 each from IREX, 655 Third Avenue, New York 10017.

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News Summary

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Financial contributions from outside donors are increasingly important to the success of many universities' intercollegiate athletic programs. Story on Page 5.

A district court's refusal to halt women's championships offered by the National Collegiate Athletic Association has been appealed. Story on Page 6.

The association that accredits business schools has been urged to be more flexible in deciding whether or not a school should get its approval. Story on Page 8.

"Human service" programs in the education schools are falling into disfavor with many educators. Story on Page 9.

Administration officials say students' access to higher education will not be seriously curtailed by proposed cuts in federal student aid. Story on Page 11.

The Reagan Administration, under a temporary injunction issued by a U.S. appeals court, may not grant tax-exempt status to Bob Jones University and the Goldsboro Christian Schools. Story on Page 11.

The government has dropped a controversial rule requiring universities to give federal agencies early notice of patentable inventions resulting from federally financed research. Story on Page 15.

Israeli officials will audit Bir Zeit University to determine if the Arab institution is receiving funds from the Palestine Liberation Organization. Story on Page 17.

Histories of aviation, guides to regional flora and fauna, and new poetry collections will be among the books published by university presses this spring. Story on Page 19.

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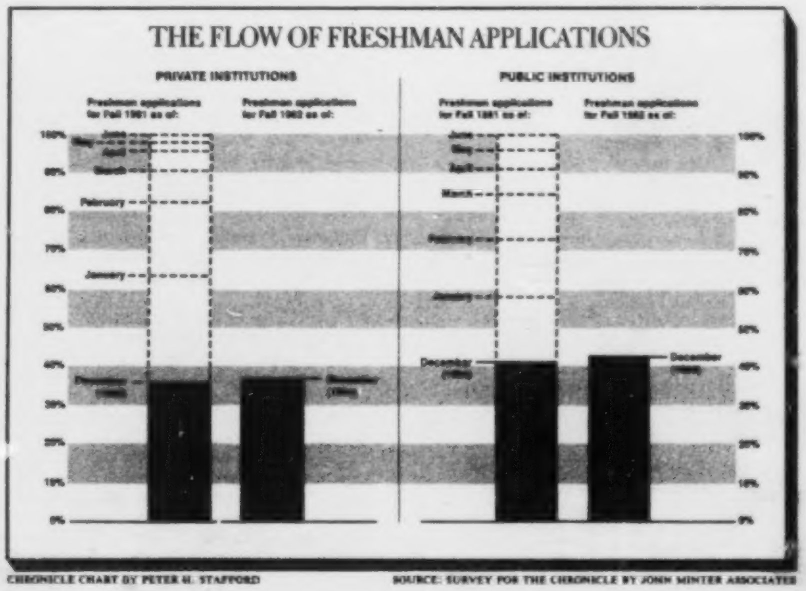
Early Sampling of College Applications Indicates Probable Enrollment Decline

By JACK MAGARRELL

THE FLOW OF FRESHMAN APPLICATIONS



CHRONICLE CHART BY PETER H. STAFFORD

SOURCE: SURVEY FOR THE CHRONICLE BY JOHN MINTER ASSOCIATES

College and university enrollments can be expected to decline widely next year, *The Chronicle*'s first survey of applications to next fall's freshman classes indicates.

The total number of applications is slightly higher than at the same time last year, but the proportion of colleges and universities reporting fewer applications has risen sharply.

The Chronicle Survey, which estimates trends on the basis of data from 274 four-year colleges and universities, found that 43 per cent of the institutions had fewer freshman applications at the end of last December than they had had a year earlier.

30 Pct. Reported Declines

A year ago, the Chronicle Survey found fewer than 30 per cent of the institutions reporting a decline in applications as of December 31. By last June, when virtually all applications were in, the proportion of institutions reporting a decline remained under 30 per cent.

Total freshman applications last year were up 6.5 per cent, according to the Chronicle Survey.

Figures on how many of the applicants actually enrolled are not yet available, but the increase in total enrollment for the fall of 1981 was estimated by the National Center for Education Statistics at less than 2 per cent.

The overall increase in the number of freshman applications reported to date is so slim that it could disappear before fall.

A decline in the number of college fresh-

Continued on Page 6, Column 3

Administration Accused of Undermining Past Progress in Ending Education Bias

By CHERYL M. FIELDS

WASHINGTON

In increasingly bitter attacks on President Reagan's policies, the U.S. Commission on Civil Rights and the Leadership Conference on Civil Rights have accused the White House of trying to wipe out years of progress in eliminating bias in education and employment.

But William B. Reynolds, Assistant Attorney General for civil rights, last week defended the Administration's record in enforcing equal-rights laws. He said the Administration had decided to drop such remedies as "racial quotas" because they didn't work and were not supported by the public.

The Commission on Civil Rights told the President that it viewed "with increasing alarm efforts to end federal leadership in promoting equal educational opportunity."

The text of the letter to President Reagan from the U.S. Commission on Civil Rights appears on Pages 12-13.

In a 17-page letter, the commission set forth a list of actions by the Education Department and the Department of Justice that it said "would roll back protections" enacted by Congress to enforce the equal-rights guarantees of the Constitution.

"Beginning in the 1960s," the commission said, "Congress enacted civil rights laws to reinforce and extend the equal rights guarantees of the Thirteenth, Fourteenth, and Fifteenth Amendments."

A footnote following that statement referred the President to the U.S. Constitution. It also referred him to a lengthy statement published by the commission last

Continued on Page 12, Column 1

Universities Losing High Priority in Many Countries

By MALCOLM G. SCULLY

PARIS

The widely reported economic woes that have hit colleges and universities in the United States and Great Britain are spreading to many other developed countries as governments seek to curb public spending and to solve such pressing social problems as youth unemployment.

As a result, universities have lost their high priority in some countries and face the prospect of declining support and prestige, according to officials of the Organization for Economic Cooperation and Development here.

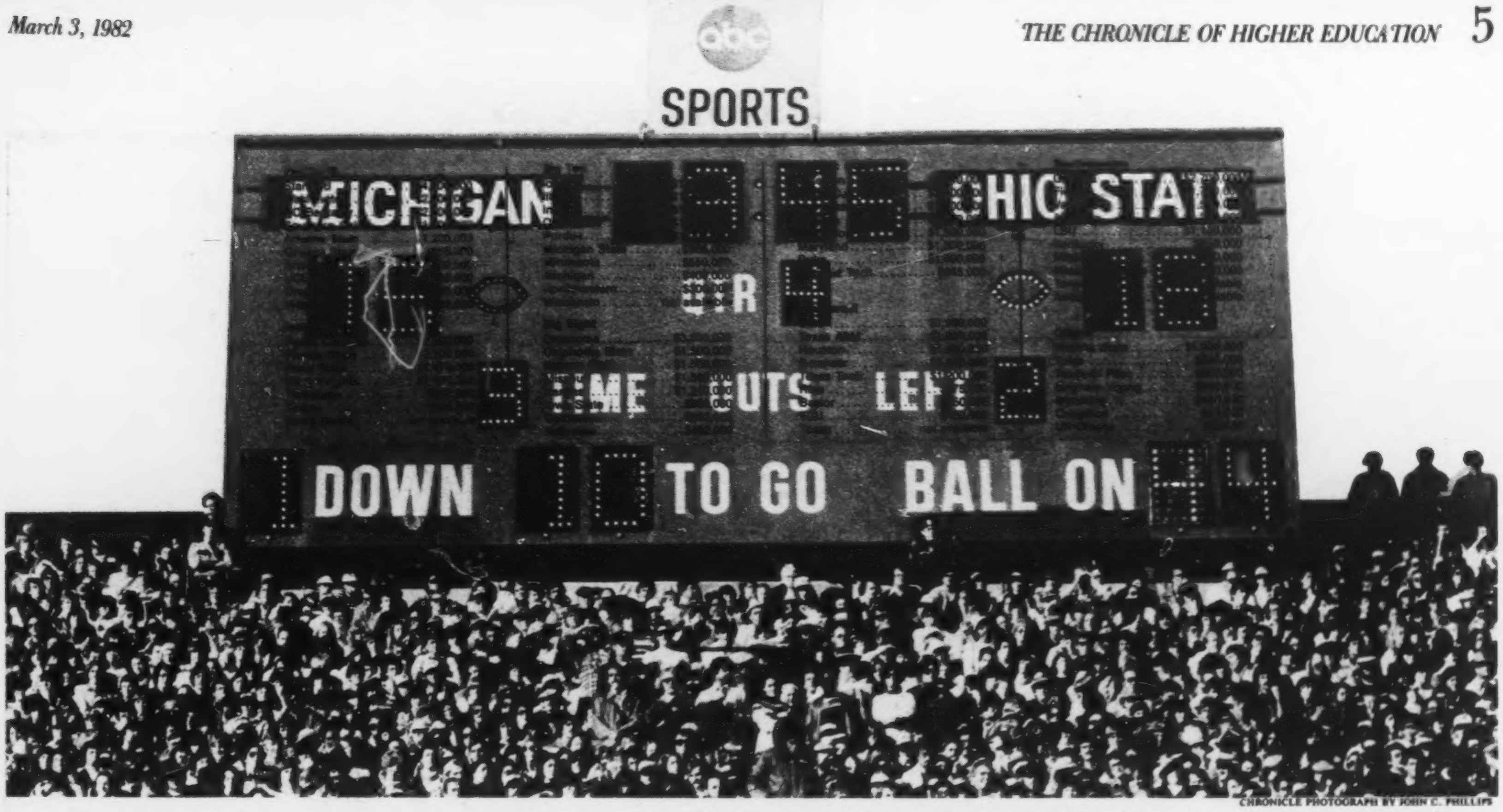
Spending Peak in 1975

While the situation varies from one country to another, analyses prepared for an O.E.C.D. conference on higher education in the 1980's reveal that in most of the organization's 25 member countries, public spending for higher education reached a peak in 1975 and has been declining since.

Dorotea Furth, director of the program on higher education at the O.E.C.D.'s directorate for social affairs, manpower, and education, said in an interview here that the recent publicity about spending cuts for higher education in Great Britain and the United States may have overdramatized the problems facing universities in those countries.

"It's a crisis for British universities when they have four students for every

Continued on Page 18, Column 1



CHRONICLE PHOTOGRAPH BY JOHN C. PHILLIPS

The table above, compiled by the Omaha World-Herald, shows donations to athletic programs at selected colleges for 1980-81, or for the latest year for which the institutions had records.

Large Expenses for Sports Programs Lead More Colleges to Seek Funds from Donors

But some educators are questioning the influence of contributors on intercollegiate athletics

By LORENZO MIDDLETON

The University of Notre Dame, which has one of the most successful intercollegiate athletic programs in the country, was shaken about two years ago by the realization that the operation might soon be in the red.

Although Notre Dame's basketball and football teams together earned more than $4-million a year from ticket sales and concessions, the profits were being consumed by rising costs and by other sports that produced no revenue.

The university's net income from athletics, which reached a record of almost $1-million in 1975, fell to only $29,000 in academic 1980-81. The addition of five women's varsity teams since 1976, in order to comply with federal anti-sex-bias laws, has been responsible for a large part of the drain, university officials say.

The loss of the extra revenue from sports, which had been used to help finance several nonathletic construction projects and academic programs, was a setback for the entire university, they say.

So Notre Dame, like many other colleges and universities these days, began an all-out effort to make its sports enterprise economically viable.

Fewer Sports, Smaller Teams

At some institutions, the increasing expense of athletic programs has led to drastic cost-cutting measures, including the elimination of some sports.

Others have reduced the size of their teams. The number of men participating in National Collegiate Athletic Association sports declined 7.6 per cent from 1977 to 1981, according to a recent report by the N.C.A.A. (The report also noted that the number of woman participants increased by 1.3 per cent.) But cutting back athletics at Notre Dame is unthinkable.

"Notre Dame without a comprehensive athletic program would seem to be almost a contradiction in terms," says a university brochure. "Without athletics the university would not be the same as we have known it. The camaraderie of the various teams, not just football, contributes to the famed Notre Dame spirit."

So, instead of trimming the program, the university decided to try, for the first time in its history, to raise money for athletics from outside contributors.

The fund-raising campaign began last fall with the establishment of an "athletic endowment fund." Unlike traditional "booster clubs," which seek yearly contributions, the endowment fund has the one-time goal of collecting $10-million. Income from the endowment's investments will be used to help pay the costs of operating 14 men's and women's varsity teams and 49 club and intramural teams that do not make money on their own.

Average Donation: $246,000

Notre Dame's fund-raising effort is an example of the increasing importance of outside financial contributions to the success of college and university athletic programs. Such support is as important to public institutions as to private ones, because most states provide little or no money for intercollegiate athletics, expecting them to pay for themselves.

In its last study of the financing of athletic programs, the N.C.A.A. reported that in 1977 institutions with Division I football teams received an average of $246,000 in private donations. That sum amounted to 10 per cent of the colleges' total athletic budgets, compared with 5 per cent in 1965.

A more recent study conducted for the N.C.A.A. by Mitchell H. Raiborn, a professor of accounting at Bradley University, is to be released in May.

There is evidence that donations to college athletics have increased substantially since 1978.

A recent survey by the Omaha *World-Herald*, for example, found that 58 universities with major football teams had raised a total of $77.7-million in fiscal 1980-81—an average of $1.34-million each.

A new fund-raising drive at the University of Nebraska at Lincoln brought $1.1-million in donations and pledges in 1981—more than double the amount of contributions reported by the university the previous year.

Athletic officials at Nebraska, and at colleges and universities all over the country, say the need for increased contributions became pressing in the late 1970's as they began to comply with federal requirements for greater athletic opportunities for women.

"Historically the football revenue has supported the full athletic program, but the drain on the football receipts created by the inclusion of women's athletic programs was more than could be managed without seeking other sources of income," says D. B. Varner, a former chancellor of the University of Nebraska and now chairman of its fund-raising foundation.

While many sports programs have raised some money in the past through booster clubs, the activities of many of those organizations are now more professional. Some are joining universitywide fund-raising organizations to reduce duplication of effort and to increase the donations.

The major challenge for many fund raisers is to persuade prospective donors to hand over large sums of money in exchange for little more than a tax deduction and a bumper sticker.

The growth in popularity of college football and basketball over the years has made it more and more difficult to provide the traditional perquisite of the large contributor—guaranteed seats in the best section of the stadium.

Wisconsin's Goal: $1-Million

The fund-raisers say the most they can promise a potential contributor these days is the continued existence of an athletic program.

"Our aim," says David J. Spengler of the University of Wisconsin at Madison, "is to sit down and to point out to prospective donors or existing donors that if they enjoy watching our athletes play, and they want to continue to watch them every Saturday, they will have to give more support to our program."

Mr. Spengler is a Wisconsin alumnus and a former banker who was hired in November as full-time athletic-development officer at the university. He says he believes that argument will persuade Wisconsin's supporters to raise their annual contributions to the athletic program from the present level of about $250,000 a year to $1-million.

As more and more colleges turn to outside donors for help in raising money for their athletic programs, educators around the country are beginning to question the influence of such donors on the programs.

Many university administrators have expressed concern about the inflation of coaches' salaries since the announcement in January that the new coach at Texas A&M University would earn about

Continued on Following Page

Appeals Court Hears Plea to Bar NCAA from Holding Women's Championships

WASHINGTON

The U.S. Court of Appeals for the District of Columbia Circuit was expected to decide last week whether to grant a temporary injunction halting the women's sports championships offered by the National Collegiate Athletics Association.

The court agreed to rule on an emergency request for the injunction filed by the Association for Intercollegiate Athletics for Women.

The women's group went to the appeals court after a district-court judge refused to halt the championships, saying the group had failed to convince him that it was likely to win the antitrust lawsuit that it had filed against the N.C.A.A. last October.

Judge Charles R. Richey of the U.S. District Court for the District of Columbia also said the group had not shown that it would suffer irreparable injury if the injunction were not granted, or shown that a temporary injunction would be in the public interest.

The women's organization said that if it did not receive judicial relief by March 1, it would have to notify its members that it could not continue to operate in academic 1982-83.

The A.I.A.W. alleged that the N.C.A.A. had violated antitrust laws by unfairly using its profits from men's athletics to begin a $3-million program of annual championships for women last fall.

The group told the circuit court that since the A.I.A.W. could not match that program, it had lost members and television revenue, making it impossible for it to continue operating if the N.C.A.A. continued to spend $3-million a year on women's championships that are only expected to generate about $500,000 in revenue.

In asking for the injunction, the women's group also told the appeals court that Judge Richey had given no reason for holding that the group had not proved it would suffer irreparable injury—despite his "apparent belief that the [A.I.A.W.] would go out of business absent the requested relief."

"When even death is insufficient to constitute irreparable injury it is difficult to imagine the standard being employed," the A.I.A.W. told the appeals court.

In opposing the request for a preliminary injunction, the N.C.A.A. told the appeals court that there was no need for the action, because the women's group would be able to operate "at least through June, 1982," and Judge Richey had said he would try to hold a trial on the merits of A.I.A.W.'s complaint by that date.

Further, it said, halting the N.C.A.A. women's championships "would not only diminish competition, but also would eliminate the new opportunities for women they were intended to provide—including, importantly, the first N.C.A.A. Division I women's national collegiate basketball championship that is to take place on March 28, 1982, and be telecast live."

The N.C.A.A. also said the women's organization "was trying to use the antitrust laws to destroy competition." It said that, contrary to A.I.A.W.'s claim that the N.C.A.A. violated antitrust laws by paying travel expenses for women's teams, "there is no evidence of coercion or anticompetitive intent—the intent was to provide equal opportunity to male and female athletes participating in N.C.A.A. championship events.

"The ability to provide travel reimbursement without a dues increase is a product simply of the presence of an N.C.A.A. budget surplus—no monopoly was required."

The injunction that the women's organization seeks "would reduce competitive opportunities and deny equal financial support for women," the N.C.A.A. said.

Sports

Continued from Preceding Page

$287,000 a year—most of which will be paid by alumni and booster clubs—and the report a few days later that the University of Nebraska boosters' club was raising $100,000 to supplement the salary of the football coach there.

Concern about the influence of outside supporters has been reflected in recent findings of the N.C.A.A.'s infractions committee. Over the past year, nearly all of the institutions that were put on probation committed violations involving "athletic representatives"—a euphemism for boosters—who had provided improper benefits to athletes or recruits.

No Booster Club

According to officials at Notre Dame, the newly established endowment fund—which will accept contributions only from former athletes at the university—"will make it unnecessary to consider seriously the formation of a booster club or similar organization which at some schools have been so prone to irregularities and abuse."

Some athletic officials believe, however, that using a booster club to funnel donations into the athletic programs is the best way to prevent abuses.

"Normally, when you have people who get a program in trouble, it's boosters who have acted on their own that nobody has any control of," says Andy Miller, director of the Seminole Boosters Club at Florida State University. "I think it's unfortunate that the organized boosters' club is getting the rap for the action of a few individuals."

CHRONICLE SURVEY

Changes in Number of Freshman Applicants

December 31, 1981, compared with December 31, 1980

	Per cent change in average (a)	Per cent reporting increase	Per cent reporting decrease	Per cent change		
				Low (b)	Median (c)	High (d)
Private colleges and universities						
Research and Ph.D.-granting...	+ 0.8%	57.1%	42.9%	− 3.6%	+ 0.4%	+ 3.5%
Comprehensive................	+ 5.3%	65.5%	34.5%	− 4.6%	+ 5.3%	+15.1%
Liberal arts..............	− 0.2%	52.0%	44.0%	−15.8%	+ 1.9%	+13.4%
Regions						
Northeast and Mid-Atlantic.....	+ 2.9%	60.3%	39.7%	− 6.7%	+ 2.9%	+13.5%
Great Lakes and Plains........	+ 5.1%	58.7%	38.1%	− 8.6%	+ 5.5%	+15.9%
Southeast....................	− 3.0%	48.5%	48.5%	−17.8%	− 0.2%	+12.5%
West and Southwest...........	− 1.0%	52.6	42.1%	−15.7%	+ 0.1%	+ 5.4%
Enrollment						
500 − 999................	+ 1.6%	44.9%	46.9%	−16.7%	—	+14.4%
1,000 − 2,499................	+ 2.7%	57.9%	42.1%	−13.2%	+ 3.6%	+13.1%
2,500 − 4,999................	+ 1.7%	68.0%	32.0%	− 6.6%	+ 7.3%	+15.1%
5,000 − 9,999................	+ 3.1%	68.4%	31.6%	− 3.2%	+ 3.3%	+ 7.7%
10,000 and over...............	+ 0.2%	50.0%	50.0%	− 3.7%	− 1.8%	+ 1.1%
All private......................	**+ 0.7%**	**54.5%**	**42.4%**	**− 8.6%**	**+ 3.2%**	**+13.7%**
Public colleges and universities						
Research and Ph.D.-granting...	+ 4.6%	53.1%	46.9%	− 9.2%	+ 0.9%	+15.4%
Comprehensive................	+ 2.6%	55.3%	44.7%	−14.6%	+ 3.9%	+24.2%
Regions						
Northeast and Mid-Atlantic.....	+18.5%	58.8%	41.2%	− 9.7%	+ 3.9%	+33.5%
Great Lakes and Plains........	+ 0.1%	59.5	40.5%	− 7.1%	+ 2.7%	+18.1%
Southeast....................	− 3.4%	39.1%	60.9%	−19.6%	− 4.8%	+ 7.5%
West and Southwest...........	+ 8.5%	57.1%	42.9%	−12.2%	+ 0.9%	+22.2%
Enrollment						
500 − 2,499................	− 5.4%	50.0%	50.0%	−21.5%	− 3.6%	+16.7%
2,500 − 4,999................	+ 8.4%	50.0%	50.0%	−21.9%	−14.2%	+36.1%
5,000 − 9,999................	− 5.0%	42.9%	57.1%	−24.1%	− 4.2%	+11.0%
10,000 − 19,999................	+ 0.4%	65.4%	34.6%	− 7.8%	+ 6.2%	+19.9%
20,000 and over...............	+ 7.3%	54.8%	45.2%	− 7.4%	+ 1.1%	+18.1%
All public institutions...........	**+ 3.1%**	**54.8%**	**45.2%**	**−10.7%**	**+ 1.3%**	**+19.0%**
All institutions.................	**+ 1.6%**	**54.6%**	**43.4%**	**− 9.5%**	**+ 2.4%**	**+15.5%**

a) Percentage change in mean number of applications by December 31, 1981, compared with the mean for a year earlier.

(b) The bottom one-fourth of the institutions reported changes smaller than the percentage shown.

(c) Half of the institutions reported changes greater than the percentage shown.

(d) The top one-fourth of the institutions reported changes greater than the percentage shown.

Note: Survey data are from a stratified random sample of 274 four-year institutions, excluding colleges with enrollment under 500.

SOURCE: SURVEY FOR THE CHRONICLE BY JOHN MINTER ASSOCIATES

Sampling of Applications

Continued from Page 1

men—or even a decline in total enrollment—would not surprise education officials who have been watching population trends.

The Census Bureau estimates there are 1.4 per cent fewer 18-year-olds in the country this year than there were last year, and 4.7 per cent fewer than in the peak year of 1979.

Increases in total enrollment in the past three years have been attributed, in large part, to economic conditions that made study more attractive than jobhunting.

Eventually, some education officials warn, the effect of a poor job market on enrollment will be offset by an increasing number of students who cannot afford to stay in college.

At the University of Wisconsin's Madison campus, concern about a growing proportion of freshman applicants who failed to enroll—8 per cent last fall—prompted a study of the "no-shows."

David Vinson, admissions director, said nearly 40 per cent of the no-shows said either that the university had not offered enough financial aid or simply that the cost of attending had become too high.

Much Smaller Increase

Although patterns can change between December and June, the early applications represent a substantial share of the total.

In 1981, 38 per cent of the freshman applications on hand at the end of June had been received before December 31, 1980.

As of December 31, 1981, applications for admission to freshman classes next fall were up 1.6 per cent compared with the same period a year earlier.

The count in December, 1980, showed a 13-per-cent increase in applications, although that was cut in half, to 6.5 per cent, by the end of June, 1981.

The latest report shows more than 54 per cent of the institutions, both public and private, had an increased number of applications as of last December 31, compared with the same date a year earlier.

Decreases in the number of applications were most common at the larger private institutions and the smaller public institutions. Such decreases were reported by 50 per cent of the private institutions with 10,000 students or more, and by at least 50 per cent of public institutions with enrollments of less than 10,000.

Big Declines in Southeast

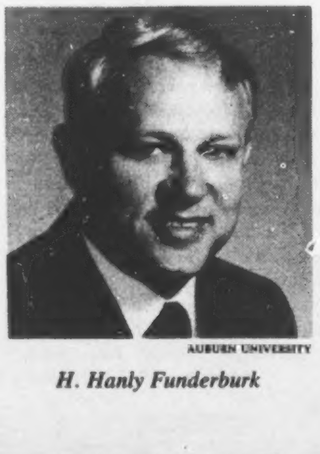
Geographically, the Southeast reported the biggest and most widespread decreases. That region's institutions averaged 3 per cent fewer applications than a year earlier, with decreases reported by 48 per cent of the private institutions and 61 per cent of the public institutions.

The Chronicle Survey of freshman admission applications is based on a stratified random sample of 274 public and private institutions, weighted to represent all four-year institutions with enrollments of 500 or more.

Later reports on trends in the number of the applications for admission to next fall's freshman classes will be published in *The Chronicle* during the next four months.

The Chronicle Survey is conducted for *The Chronicle of Higher Education* by John Minter Associates, Box 107, Boulder, Colo. 80306, a research organization that specializes in higher-education studies.

Auburn Trustees Back President After Negative Rating by Faculty



AUBURN UNIVERSITY

H. Hanly Funderburk

AUBURN, ALA.

After flunking two tests by the Auburn University faculty, President H. Hanly Funderburk has received a strong vote of confidence from the institution's board of trustees.

The first test was a formal evaluation of his presidency by the faculty. Questionnaires were completed by 680 of 1,042 faculty members, and the results did not favor the president.

A majority of the respondents gave Mr. Funderburk a grade of "poor" on 20 of the 50 items rated. On none of the items did he get a "good" rating from a majority. On only four did as many as a third of the faculty members rate him "good."

More than three-fourths said the president was doing a poor job of building morale and instilling enthusiasm about the institution. Over 60 per cent gave him a poor rating for effectiveness in overall leadership.

Mr. Funderburk's best scores were on fiscal management. More than 62 per cent gave him a rating of "fair" or "good" in that area.

Two days after the results of the evaluation were made public on the campus, the faculty met in a special session to consider a resolution expressing confidence in President Funderburk. The resolution was supported by 416 faculty members, but opposed by 455.

The following week, the university's board of trustees met, with Alabama's governor, Forrest H. (Fob) James, Jr., presiding. With only one of 12 board members not recorded in favor, the board of trustees declared that it "fully endorses the efforts made by President Funderburk to address the needs of Auburn University and hereby reaffirms our confidence in his ability to provide strong and effective leadership."

The board expressed concern over the criticism of Mr Funderburk and called upon faculty members to join the trustees and the president to face the issues "with a spirit of harmony."

Mr. Funderburk, who became president two years ago, served previously as chancellor of the university's Montgomery campus. —J.M.

More Flexibility Urged for Reviews of Business Schools

By **ROBERT L. JACOBSON**

The American Assembly of Collegiate Schools of Business has been asked by a special committee that it created two years ago to adopt a much more flexible approach to deciding which schools should be accredited.

The panel's recommendations are scheduled to be voted on in some form at the assembly's annual meeting next month. They would allow the evaluators' broad judgments of academic quality to override many of the assembly's quantitative standards on such things as the curriculum and faculty qualifications. In addition, several of the numerical requirements themselves would be lowered.

Some advocates of the changes took pains last week to explain that no relaxation of standards was intended. In fact, they said, for some schools the effect might be just the opposite. Other supporters of the proposals said it remained to be seen whether any reduction of quality might result, but they agreed that an easing of requirements was not the aim.

The proposals reflect widespread concern among business educators that the standards are too burdensome and have been enforced too rigidly at a time when their schools—in the face of financial problems throughout higher education—are experiencing both expanding enrollment and a severe shortage of faculty members with doctoral degrees.

Strong Schools Uncomfortable

Even business schools generally regarded as strong have become increasingly uncomfortable with some of the assembly's standards in recent years, and their deans have argued that the rules do not leave adequate room for diversity and innovation.

Some deans have threatened to pull their schools out of the assembly if reforms are not adopted soon. However, several officials familiar with the deliberations said last week that the basic provisions of the proposed changes were likely to be approved.

Richard R. Weeks, chairman of the assembly's standing committee on standards, said that at least the philosophy behind the proposals, if not all of their original wording, had already produced "general agreement."

Both Mr. Weeks and Lawrence E. McKibbin, president-elect of the assembly, were members of the special committee, and indicated that they supported its basic recommendations.

Mr. McKibbin, who is dean of the College of Business Administration at the University of Oklahoma, said the proposals were an attempt to discourage evaluators from using an "overly prescriptive approach" toward high-quality schools while assuring that schools "barely on the threshold of accreditability" did not get by on numbers alone.

The proposals thus might make it easier for top business schools to gain and keep their accreditation, Mr. McKibbin said, but harder for "marginal" schools to do the same thing. One problem with numerical standards is that they have enabled some schools to "play games with the numbers" and gain the assembly's stamp of approval, even though, in a broader qualitative sense, they did not measure up, he said.

Mr. McKibbin also said he was one of the deans who had talked of withdrawing from the assembly if the standards were not revised. "I don't like to be told in detail how to do my job," he said. "I tend to rebel."

Among other things, the proposals would:

▶ Convert official "interpretations" of the assembly's standards into "guidelines," thereby signaling accrediting teams that their professional judgment of a school's overall quality was more important than whether the school satisfied certain numerical prescriptions.

▶ Relieve "mature" schools—*i.e.*, those with at least 15 years of accredited standing—of the need to submit detailed self-study reports every five years as a condition for maintaining accreditation. Instead, officials of those schools could certify that they continued to satisfy the standards.

▶ Give schools new latitude in deciding how to comply with an assembly rule that all students must be given at least a year's exposure to a "common body of knowledge," which includes course work in marketing, economics, accounting, organization theory, and administration.

In addition, the committee recommended specific changes or new language for several quantitative standards intended to measure the adequacy of business-school faculties.

For example, in the case of a requirement that schools have the equivalent of one full-time faculty member for every 400 undergraduate student credit hours as well as one faculty member for every 300 graduate student credit hours, the committee proposed a guideline acknowledging that the numbers "may not be fully applicable" to all institutions. A school with "unusual" resources should be allowed to demonstrate that it could otherwise "meet its commitments," the panel said.

Another proposed revision would lower the minimum proportion of faculty members teaching undergraduate courses who were required to hold doctoral degrees. Instead of specifying a 50-per-cent minimum for all undergraduate instruction, the committee suggested a 25-per-cent floor for the first two years and 50 per cent for the upper division. The existing standard of 75 per cent for the graduate level would be maintained.

At the same time, however, the committee stressed that the percentages "should not necessarily prescribe" how a particular school deployed its faculty resources.

In a related proposal, the panel modified a standard that has had the effect of requiring schools to provide certain proportions of "doctorally qualified" instructors for virtually every subject. In addition to lowering the recommended percentages, the committee observed that "reasonable deviations" should be permitted in relatively small programs.

At least one of the recommended changes is likely to make accreditation more difficult for some schools, according to the committee's chairman, T. R. Martin, professor of business at Marquette University. That proposal would require schools offering undergraduate and graduate programs to seek accreditation for both of them at the same time.

Under a rule adopted in 1976, institutions offering programs at both levels but accredited for only one of them have had to gain approval of the unaccredited program within five years or lose accreditation for the first one.

Last spring 20 schools previously accredited at the bachelor's level had applications for master's programs under that rule. Assembly officials said that several of those schools could well be disaccredited this year.

FACT-FILE

How Enrollment Divides Among 10 Types of College

The following table shows variations in the percentage of public-college students enrolled in each of 10 types of institutions in each state.

The national averages show the percentage of students in each type of institution, the average amount of state and local appropriations per student, and the average tuition revenue per student in 1978-79, the latest year for which such information is available.

The table, based on data from the National Center for Education Statistics, was developed by D. Kent Halstead, a senior research associate at the National Institute of Education, to show the differences in financial requirements of higher-education systems (see *The Chronicle*, February 24).

Copies of the Halstead report are available for $5.14 each ($1.11 each in microfiche) from the Educational Resources Information Center, Document Reproduction Service, Box 190, Arlington, Va. 22210.

	Research universities (medical)	Research universities (nonmedical)	Other universities (medical)	Other universities (nonmedical)	Comprehensive institutions	Baccalaureate colleges	2-year colleges (academic)	2-year colleges (occupational)	Health-professions institutions	Other professional institutions
Alabama	22.9%	0.0%	0.0%	13.2%	32.0%	5.5%	22.4%	3.4%	0.0%	0.0%
Alaska	0.0%	0.0%	0.0%	0.0%	36.8%	0.0%	43.9%	17.9%	0.0%	1.4%
Arizona	20.5%	0.0%	0.0%	25.0%	9.8%	0.0%	42.8%	1.7%	0.0%	0.0%
Arkansas	0.0%	27.9%	0.0%	0.0%	39.1%	16.5%	13.3%	0.8%	2.4%	0.0%
California	6.4%	3.5%	1.0%	2.2%	26.5%	0.0%	58.1%	1.6%	0.4%	0.2%
Colorado	16.0%	18.5%	0.0%	9.5%	12.9%	16.8%	22.5%	0.0%	1.3%	2.3%
Connecticut	0.0%	0.0%	0.0%	28.3%	35.3%	0.0%	30.0%	5.5%	0.8%	0.0%
Delaware	0.0%	0.0%	0.0%	72.2%	0.0%	8.4%	0.0%	19.5%	0.0%	0.0%
Florida	13.2%	0.0%	7.8%	8.9%	14.8%	0.0%	56.1%	0.2%	0.0%	0.0%
Georgia	18.0%	8.8%	0.0%	14.2%	27.9%	3.0%	25.1%	0.0%	1.6%	1.6%
Hawaii	52.1%	0.0%	0.0%	0.0%	0.0%	8.0%	20.6%	19.3%	0.0%	0.0%
Idaho	0.0%	0.0%	0.0%	30.0%	51.3%	4.2%	14.5%	0.0%	0.0%	0.0%
Illinois	10.7%	0.0%	6.9%	12.5%	21.1%	0.0%	46.8%	0.4%	1.6%	0.0%
Indiana	22.2%	0.0%	0.0%	33.6%	28.8%	1.7%	3.0%	7.1%	0.0%	3.6%
Iowa	56.5%	0.0%	0.0%	0.0%	12.0%	0.0%	18.4%	14.1%	0.0%	0.0%
Kansas	18.7%	0.0%	0.0%	23.6%	27.8%	5.1%	22.5%	0.3%	2.1%	0.0%
Kentucky	22.7%	0.0%	16.6%	0.0%	38.9%	7.8%	12.9%	0.0%	0.0%	0.0%
Louisiana	0.0%	0.0%	20.3%	0.0%	64.2%	4.3%	1.3%	7.7%	2.2%	0.0%
Maine	0.0%	0.0%	0.0%	42.7%	23.8%	6.3%	0.0%	6.7%	0.0%	20.5%
Maryland	0.0%	24.9%	0.0%	0.0%	22.0%	9.2%	37.2%	1.3%	3.4%	1.5%
Massachusetts	0.0%	0.0%	0.0%	17.7%	34.2%	8.1%	28.6%	4.5%	0.3%	5.5%
Michigan	24.8%	0.0%	8.4%	6.0%	17.2%	9.1%	28.3%	6.1%	0.0%	0.0%
Minnesota	41.3%	0.0%	0.0%	0.0%	34.9%	3.5%	18.8%	1.5%	0.0%	0.0%
Mississippi	0.0%	14.5%	0.0%	25.4%	15.3%	3.7%	34.5%	1.9%	2.0%	2.8%
Missouri	11.9%	0.0%	6.5%	0.0%	40.1%	5.2%	24.5%	0.0%	0.0%	5.2%
Montana	0.0%	0.0%	0.0%	30.7%	39.1%	12.3%	6.3%	0.0%	0.0%	11.5%
Nebraska	38.1%	0.0%	0.0%	0.0%	35.6%	1.2%	8.3%	12.5%	3.2%	0.0%
Nevada	0.0%	0.0%	0.0%	0.0%	60.6%	0.0%	39.4%	0.0%	0.0%	0.0%
New Hampshire	0.0%	0.0%	0.0%	53.9%	14.4%	0.0%	0.0%	17.4%	0.0%	14.3%
New Jersey	0.0%	16.9%	0.0%	0.0%	36.0%	8.2%	26.4%	6.5%	1.0%	2.5%
New Mexico	0.0%	26.2%	42.2%	0.0%	17.6%	0.0%	9.6%	4.2%	0.0%	0.0%
New York	1.7%	0.0%	0.0%	13.1%	33.0%	4.6%	30.7%	12.6%	1.5%	2.7%
North Carolina	11.3%	8.7%	0.0%	5.0%	25.5%	7.4%	12.2%	28.6%	0.0%	0.3%
North Dakota	0.0%	0.0%	31.5%	0.0%	26.7%	11.7%	9.9%	14.0%	0.0%	6.2%
Ohio	26.9%	0.0%	0.0%	33.0%	13.8%	0.9%	12.6%	12.7%	0.2%	0.0%
Oklahoma	21.2%	0.0%	0.0%	17.9%	12.6%	19.1%	25.2%	1.5%	2.5%	0.0%
Oregon	0.0%	17.4%	0.0%	16.2%	15.3%	1.6%	17.1%	28.0%	1.6%	4.9
Pennsylvania	9.9%	14.8%	10.8%	0.0%	26.7%	4.4%	21.4%	9.3%	0.2%	2.4%
Rhode Island	0.0%	47.1%	0.0%	0.0%	24.7%	0.0%	28.2%	0.0%	0.0%	0.0%
South Carolina	0.0%	12.4%	0.0%	24.6%	7.7%	19.0%	2.3%	31.5%	2.5%	0.0%
South Dakota	0.0%	0.0%	27.9%	0.0%	32.0%	28.1%	0.0%	0.0%	0.0%	11.9%
Tennessee	0.0%	22.6%	0.0%	14.1%	32.9%	6.1%	13.4%	9.0%	1.9%	0.0%
Texas	6.7%	9.5%	0.0%	16.2%	29.3%	0.1%	30.1%	4.5%	1.7%	1.9%
Utah	41.2%	19.3%	0.0%	0.0%	0.0%	19.4%	6.0%	14.2%	0.0%	0.0%
Vermont	0.0%	0.0%	64.4%	0.0%	0.0%	26.2%	4.5%	5.0%	0.0%	0.0%
Virginia	9.7%	12.6%	8.6%	0.0%	25.6%	9.6%	28.5%	7.4%	0.0%	0.0%
Washington	30.5%	0.0%	0.0%	0.0%	13.3%	1.3%	43.4%	11.5%	0.0%	0.0%
West Virginia	0.0%	0.0%	35.8%	0.0%	16.4%	34.5%	7.5%	3.3%	0.4%	2.1%
Wisconsin	21.9%	0.0%	0.0%	11.1%	38.1%	3.8%	4.1%	23.0%	0.0%	0.0%
Wyoming	0.0%	0.0%	0.0%	56.9%	0.0%	0.0%	43.1%	0.0%	0.0%	0.0%
U.S. averages:										
Enrollment	12.3%	5.3%	3.4%	10.3%	25.7%	4.0%	29.5%	6.9%	0.8%	1.2%
State and local appropriations per student	$4,187	$3,363	$3,360	$2,766	$2,423	$2,202	$1,789	$2,095	$21,631	$2,550
Tuition revenues per student	1,104	1,008	1,160	925	690	732	377	506	1,226	871

Note: Based on 1978-79 data from the National Center for Education Statistics. In the university categories, "medical" includes dental, osteopathic, and veterinary programs.

SOURCE: D. KENT HALSTEAD, NATIONAL INSTITUTE OF EDUCATION

Salaries Up 10.1 Pct. in 1981-82 for 'Continuing' Teachers

WASHINGTON

A preliminary report by the American Association of University Professors indicates that the pay of "continuing" faculty members—those who worked at the same college or university last year and this year—rose by 10.1 per cent in 1981-82.

The salaries of such faculty members at public colleges and universities increased 9.3 per cent, on the average, compared with 11.5 per cent at private institutions, according to the report.

The largest increases, on the average, were at colleges that offer degrees only at the bachelor's level. Private, independent institutions in that category raised the salaries of continuing faculty members by an average of 12 per cent, compared with 11.3 per cent at private, church-related colleges and 10.7 per cent at public colleges in that category.

Increases received by continuing faculty members generally exceed those of all faculty members, "because of the larger salary increases associated with promotions and retention," the A.A.U.P. said.

In 1980-81, salaries for continuing faculty members were up 10 per cent from the previous year's average, while salaries for all faculty members rose 8.7 per cent, according to the report.

The Chronicle Survey reported last fall that salaries of all faculty members this year were up by an average of 8.9 per cent (*The Chronicle*, November 11).

The Chronicle Survey, conducted by John Minter Associates, is based on data collected from a sample of individual faculty members, whereas the A.A.U.P. survey is based on data provided by the institutions.

—JACK MAGARRELL

Salary Increases in 1981-82 for Continuing Faculty Members

	Public institutions	Church-related institutions	Other private institutions	All institutions
Ph.D.-granting universities				
Professor	8.9%	11.0%	11.1%	9.4%
Associate professor	9.7%	13.9%	11.2%	10.3%
Assistant professor	10.3%	12.3%	12.5%	10.9%
Instructor	10.5%	12.6%	11.3%	10.8%
All ranks	9.5%	12.3%	11.4%	10.0%
Institutions granting other graduate degrees				
Professor	8.4%	10.5%	10.7%	9.1%
Associate professor	9.0%	11.3%	10.8%	9.7%
Assistant professor	9.2%	11.9%	11.3%	10.0%
Instructor	10.8%	9.3%	10.7%	10.6%
All ranks	8.9%	11.1%	10.9%	9.6%
Institutions granting only bachelor's degrees				
Professor	9.5%	10.9%	11.7%	11.1%
Associate professor	10.7%	10.5%	11.8%	11.0%
Assistant professor	11.8%	12.5%	12.5%	12.4%
Instructor	10.6%	11.0%	12.1%	11.3%
All ranks	10.7%	11.3%	12.0%	11.5%
2-year colleges				
Professor	8.1%	9.4%	12.0%	8.2%
Associate professor	8.8%	12.0%	10.7%	8.9%
Assistant professor	8.1%	13.7%	12.4%	8.3%
Instructor	9.5%	10.3%	14.6%	9.7%
All ranks	8.6%	11.6%	12.2%	8.7%
Institutions without academic ranks	9.8%	16.7%	8.9%	10.2%
All institutions except those without academic ranks				
Professor	8.9%	10.8%	11.2%	9.8%
Associate professor	9.4%	11.5%	11.3%	10.1%
Assistant professor	9.7%	12.3%	12.1%	11.7%
Instructor	10.4%	10.9%	11.5%	10.7%
All ranks	9.3%	11.5%	11.5%	10.1%

Note: Increases are for faculty members employed full time at the same institution last year and this year. The preliminary figures, prepared by Maryse Eymonerie Associates, are based on information from 1,094 institutions which submitted data by December 15 for the American Association of University Professors survey on faculty salary increases.

SOURCE: AMERICAN ASSOCIATION OF UNIVERSITY PROFESSORS

Pennsylvania Abandons $75 Tuition Hike

HARRISBURG, PA.

Robert Scanlon, Pennsylvania's Secretary of Education, last week dropped plans to collect a $75 increase in tuition for the current semester from students at 14 state colleges.

His decision came after a state judge granted a temporary injunction preventing the colleges from collecting the increase, which had been approved by Mr. Scanlon and the State College and University Directors Board in January.

The increase, from $625 to $700, was challenged in court by the Commonwealth Association of Students. According to Joyce Cheepudom, the association's executive director, the board's vote was conducted improperly. Two members voted by phone, she said, and others were not informed of the meeting at all.

Mr. Scanlon said the colleges would refund the money to students who have already paid the increase.

The money raised by the additional fee was to be used to pay faculty members, who were granted a 4.5-per-cent salary increase in 1977 but never received it because the state legislature failed to include it in appropriations. Pennsylvania's supreme court has ordered the state to put the raise into effect by March 1.

Mr. Scanlon said he would seek a fee increase for a later semester to cover the faculty salary increase.

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News Summary

Articles on inside pages

Gallaudet College, the only four-year liberal-arts college for the deaf, has many achievements to its credit besides the invention of the football huddle. Story on Page 4.

California will require faculty members at the state's university to disclose financial ties to private companies that award them research grants. Story on Page 6.

Budget deficits have forced the American Council on Education to cut back its publications program. Story on Page 8.

A federal appeals court has refused to halt women's sports championships sponsored by the National Collegiate Athletic Association. Story on Page 9.

Restrictions imposed by the State Department on visiting foreign scientists will again be forwarded to universities by the National Academy of Sciences. Story on Page 11.

The authority to enforce federal civil-rights laws would be consolidated in the Department of Justice under a bill introduced in the House of Representatives. Story on Page 11.

William J. Bennett, chairman of the National Endowment for the Humanities, says recent reductions in the endowment's budget may provide an opportunity to raise its standards. Story on Page 13.

Higher-education leaders from 20 countries and territories have agreed to set up an Inter-American council to foster cooperative projects designed to deal with social and economic problems. Story on Page 19.

"Managed" textbooks, despite their waning popularity, have occasioned many changes in the publishing of college texts. Story on Page 21.

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House Republicans Join Democrats in Denouncing Cuts in Student Aid

But new estimates of soaring costs may jeopardize support for guaranteed-loan program

By JANET HOOK

WASHINGTON

House Republicans, breaking ranks with the Reagan Administration, have joined Democrats in criticizing the deep cuts in student loans and other education programs proposed by the President.

However, student-aid advocates feared that Congress might seek other ways to curtail Guaranteed Student Loans because of new estimates of the rapidly growing cost of the program.

The Congressional Budget Office said that even if Congress approved the drastic new restrictions on student loans proposed by President Reagan, the guaranteed-loan program next year would cost about $1-billion more than the Administration has predicted.

Nonetheless, Republican members of the House Education and Labor Committee joined the chorus of complaints last week about the President's austere education budget when Education Secretary Terrel H. Bell appeared before the panel.

"I supported the Administration last year, but this year all the cuts have already been made," said E. Thomas Coleman of Missouri, the ranking Republican on the House Subcommittee on Postsecondary Education.

Said Marge Roukema, Republican of New Jersey, "It's quite doubtful that any changes can be made above and beyond what was done last year in the student-loan program."

Even Rep. John M. Ashbrook, a conservative Republican from Ohio and ranking minority member of the education committee, said he thought the President's budget proposals went too far—particularly in vocational-education programs.

Despite the bipartisan opposition to further cutbacks in aid, Rep. Paul Simon, Democrat of Illinois and chairman of the House Subcommittee on Postsecondary Education, warned student-aid advocates

Continued on Page 15, Column 1

SUPPORT
HIGHER
EDUCATION

CHRONICLE PHOTOGRAPH BY JOHN C. PHILLIPS

Students rally on the steps of the U.S. Capitol to protest new reductions in federal student assistance proposed by the Reagan Administration.

Students Lobby to Overturn Reagan Budget

WASHINGTON

They rallied on Capitol Hill chanting, "Books, not bombs." They hawked T-shirts carrying the slogan, "Stop the blade: fight for aid." And they told Congress that they could not withstand further reductions in federal assistance to students.

It was all part of a massive lobbying effort last week, when thousands of college students came here to protest the cutbacks in federal grants and loans proposed by President Reagan.

Sponsored by nine student groups—including the United States Student Association and the Coalition of Independent College and University Students—"National Student Lobby Day" was billed as the beginning of a nationwide campus effort to block Congressional approval of further cuts in student aid.

Although the day culminated in the standard form of opposition politics—a large rally on the steps of the Capitol—students came prepared primarily to work within the system.

Many of the men wore suits and ties and many of the women, skirts; all were armed with facts and figures detailing the potential effects of the proposed student-aid cutbacks on their institutions and on their own education plans. They paid visits to Senators, Representatives, and legislative aides to urge opposition to the Reagan budget.

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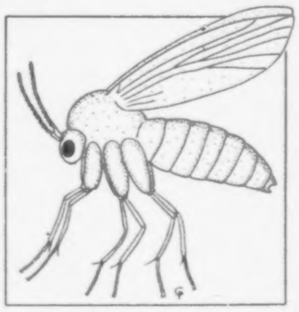
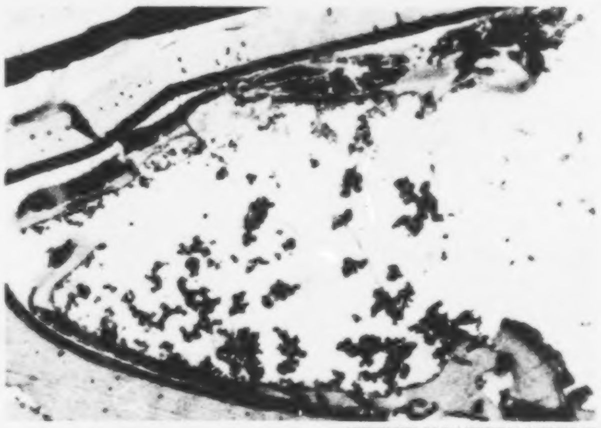
Nancy Lakowski, a senior at Loyola University of Chicago, was already rethinking her career planning in light of the proposed student-aid cutbacks.

She had planned to study for a master's degree in business next year and had expected to finance her graduate education with Guaranteed Student Loans. Since President Reagan proposed that graduate

Continued on Page 14, Column 3

Discovery of Fossil Fly May Aid Genetic Study





A fly (above) that lived 40 million years ago may contain the oldest known remains of soft-tissue cells (dark patches in micrograph).

UNIVERSITY OF CALIFORNIA AT BERKELEY

BERKELEY, CAL.

University of California researchers have discovered the 40-million-year-old remains of a fly that may offer a long-shot chance to study the evolution of the genetic code.

The fly is embedded in amber—fossilized tree sap—and is believed to be the oldest example of preserved soft tissue—once-living tissue that is not bone or horn.

The researchers—George O. Poinar, Jr., a lecturer in invertebrate pathology at Berkeley, and Roberta T. Hess, a researcher proficient in the use of electron microscopes there—published their findings in the March 5 issue of *Science*.

Mr. Poinar said in a subsequent interview that one of the most interesting discoveries was the dark patches in the nuclei of the fly cells that he and Ms. Hess observed, "which appear to be chromatin."

Chromatin forms the substance of chromosomes, which contain deoxyribonucleic acid—DNA—the material that carries the genetic code of life.

'A Long Shot'

"It's a long shot," Mr. Poinar said, "but if the [genetic] material was protected from radiation by the earth or amber, there would be a slight chance that some of the material is still viable."

If DNA exists in the fly cells and the scientists can reproduce it, he added, it will show that genetic material can be preserved for periods much longer than was believed possible.

Some scientists think DNA cannot be preserved for more than a few thousand years.

Among other things, the ancient genetic material could reveal the genetic changes that occurred during evolution to produce the present-day species.

Mr. Poinar said he had sent portions of the fly tissue to Allan C. Wilson, professor of biochemistry at Berkeley, who is developing techniques that may enable scientists to reproduce ancient DNA.

He said Mr. Wilson had found the fly cells to be in better condition than those of a mammoth that were sent to Berkeley from the Soviet Union four years ago. The mammoth's cells, which are 40,000 years old, had been preserved in ice.

Until now, Mr. Poinar added, human mummies and million-year-old mammoths were the oldest known examples of preserved soft tissue.

Although the fly cells appear to be in good condition, Mr. Wilson said, the amount of DNA that can be extracted from them is only about a thousandth of the amount that can be extracted from a mammoth's cells.

"With the fly's, I expect a larger problem in studying the DNA," Mr. Wilson said.

120 Million Years Old

Other insect remains, 120 million years old, have been preserved in amber. But scientists believe that only the hard outer skeletons have been preserved, and that the soft insides have deteriorated.

Mr. Poinar said he believed the fly cells initially observed under the microscope by Ms. Hess had been preserved so well in the amber because the sap had contained sugar, which dehydrated the cells, as well as a natural fixative.

The cell structures, including muscle fibers, nuclei, and fat droplets, were so well preserved that some of them absorbed a stain used to color fresh cells, the researchers say. "In essence, what we are describing is an extreme case of mummification, involving the preservation of insect tissue by drying and natural embalming," they say in their article in *Science*.

Mr. Poinar said he had not identified the fly specifically, but he knows that it belongs to the family *Mycetophilidae*, commonly called fungus gnats, which are typically found around decaying wood and rotting plants.

The sap that entombed the fly was produced by trees that grew 40 million years ago in the region of the Baltic Sea. Such Baltic amber is prized by collectors, who pay $200 or more for pieces to use in jewelry. —KIM McDONALD

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would receive tenure by academic 1982-83.

Mark Harris, a novelist and director of creative writing at Arizona State, filed suit last summer after the university gave him a one-year terminal contract. He argued that the institution could not let him go because he had tenure as the result of a written promise from a dean.

In a preliminary injunction, the court said the university could not let Mr. Harris go without the due process accorded tenured faculty members. The university has decided not to appeal.

▪ Public-Interest Law School at Queens Gets First Dean

Charles Halpern, a professor at the Georgetown University law school and director of the university's Institute for Public Representation from 1978 to 1981, has been named the first dean of a new public-interest law school, the City University of New York Law School at Queens College.

The new institution, which is scheduled to open in September, 1983, will train lawyers for work in such fields as regulatory reform, corporate responsibility, civil rights, immigration, public policy, health policy, consumer issues, and environmental protection, Mr. Halpern said.

▪ Energy-Management System Planned to Cut Campus Costs

A program to help campuses reduce energy consumption is being developed by higher education's Energy Task Force, a group sponsored by the American Council on Education, the National Association of College and University Business Officers, and the Association of Physical Plant Administrators of Universities and Colleges.

The project is supported by a $300,000 grant from the John A. Hartford Foundation of New York.

Chistopher E. Crittenden, director of the task force, said the Educational Facilities Laboratories of New York would be involved in the development of energy-management systems, and from 10 to 12 colleges and universities would be selected for testing the new systems.

▪ College Offers Loans to Replace U.S. Aid

Dickinson College has established a loan fund for parents of students who no longer qualify for federally guaranteed student loans because income ceilings have been lowered.

Ten-year loans, for amounts up to $2,500 per year or $10,000 in four years, will be available, starting with the 1982-83 academic year, said Donald V. Raley, director of financial aid.

The interest is expected to be about 3 percentage points below bank rates, he said.

▪ Notes

City College of the City University of New York has established the Institute for the Study of Modern Jewish Life, using a $125,000 bequest to expand the work of its Jewish-studies department. . . . Ideas for recruiting and retaining young faculty members are being sought by the Academy for Educational Development. That will be the theme of the A.E.D.'s 1982 handbook of ideas, with cash awards for the best submissions.

Donations to Universities' Athletic Programs

Due to a production error, the table below was illegible in some copies of last week's *Chronicle*. The table shows donations to athletic programs at selected colleges in 1980-81, or in the latest year for which the institutions had records. The information was compiled by the Omaha *World-Herald*.

Pacific-10	
Stanford	$4,000,000
Washington	$2,000,000
UC Berkeley	$2,000,000
Southern Cal	$1,600,000
Arizona State	$1,200,000
Oregon State	$955,000
Arizona	$800,000
UCLA	$800,000
Oregon	$765,000
Washington State	$602,000

Independents	
South Carolina	$2,300,000
Florida State	$2,100,000
Penn State	$1,470,000
West Virginia	$1,140,000
Pittsburgh	$657,000
Tulane	$525,000
Notre Dame	not available

Big Ten	
Iowa	$1,900,000
Illinois	$1,350,000
Indiana	$1,350,000
Ohio State	$1,250,000
Purdue	$1,000,000
Michigan State	$965,000
Minnesota	$550,000
Michigan	$400,000
Northwestern	$300,000
Wisconsin	not available

Big Eight	
Oklahoma	$3,500,000
Oklahoma State	$1,500,000
Kansas State	$1,500,000
Missouri	$1,500,000
Kansas	$1,240,000
Iowa State	$900,000
Colorado	$862,000
Nebraska	$462,000

Atlantic Coast	
Clemson	$3,140,000
North Carolina	$3,000,000
N C State	$1,900,000
Virginia	$1,600,000
Wake Forest	$1,500,000
Maryland	$1,300,000
Duke	$1,000,000
Georgia Tech	$945,000

Southwest	
SMU	$1,900,000
Texas A&M	$1,800,000
Houston	$1,600,000
Arkansas	$1,500,000
Texas Tech	$1,200,000
Rice	$575,000
Baylor	$450,000
TCU	$450,000
Texas	not available

Southeastern	
Georgia	$2,700,000
Florida	$1,750,000
Vanderbilt	$1,500,000
Alabama	$1,200,000
LSU	$1,100,000
Kentucky	$850,000
Mississippi	$700,000
Mississippi State	$600,000
Tennessee	not available
Auburn	not available

Others	
Wichita State	$1,000,000
Tulsa	$625,000
Texas-El Paso	$500,000
Brigham Young	$500,000
Wyoming	$450,000
Creighton	$81,000
UN-Omaha	$70,000

Notes on . . .

The Arts

The John F. Kennedy Center for the Performing Arts in Washington has won preliminary approval for the construction of an underground conservatory to train graduate students in music and theater.

To be known as the Institute of the John F. Kennedy Center, the five-story building will contain a 600-seat recital hall, a 250-seat theater, 10 classrooms, 12 studios, and 38 practice rooms. It will be dug into the ground close to the Kennedy Center's existing building, from which it will be visible only as a terraced garden with sunken light wells at its center.

Kennedy Center officials said last week that plans for the institute were far from complete, and that it was too early to say how many students it would enroll or even when it might open. Although the federal government's Commission of Fine Arts has approved the project, the Kennedy Center must still seek the blessing of both Congress and the National Capital Planning Commission—and raise about $25-million from private sources—before the digging begins.

▪

Patricia Washington McGraw, an assistant professor of English at the University of Arkansas at Little Rock, wrote a one-woman play for the Bicentennial celebration in 1976, and has been asked to perform it more than 300 times since.

Although it requires only one actor, it presents the stories of four black women who earned places in American history—Harriet Tubman, who led slaves to freedom on the "underground railroad"; Sojourner Truth, an abolitionist who sought equal educational opportunities for blacks; Phyllis Wheatley, a poet who in 1770 became the first American black woman to have her work published; and Rosa Parks, who set off a bus boycott in Montgomery, Ala., in 1955 by refusing to sit at the back of a bus.

In her play, Ms. McGraw relates how Sojourner Truth (below) answered a question about the slavery provisions in the Constitution:

"This morning the Lord and I went a'walkin' and we passed by this wheat field. I reached out and felt some of the wheat and there was no hop in it. I said, 'Lord, what's wrong with this wheat?' He said, 'Sojourner, it's got a little weevil in it.'

"So I feels around in this Constitution and I can't find Sojourner's rights, and I said, 'Lord, what's wrong with this Constitution?' And the Lord said, 'Sojourner, it's got a little weevil in it.' "

The play is called "A Profile of Four Black Women: Look Upon Them and Be Renewed."

—LAWRENCE BIEMILLER

UNIVERSITY OF ARKANSAS AT LITTLE ROCK

FACT-FILE

Median Administrative Salaries in 1981-82 for Men and Women and Minority-Group Members

	Nonminority	Minority	Nonminority differential	Male	Female	Male differential
Chief executive of a single institution	$51,812	$50,000	+ 3.6%	$52,020	$44,000	+18.2%
Executive vice-president	43,500	41,731	+ 4.2%	44,000	35,000	+25.7%
Chief academic officer	41,295	40,792	+ 1.2%	42,000	37,000	+13.5%
Chief budgeting officer	33,500	28,194	+18.8%	34,106	28,194	+21.0%
Chief business officer	39,345	33,004	+19.2%	39,550	29,682	+33.2%
Chief development and public-relations officer	37,500	28,400	+32.0%	39,000	31,000	+25.8%
Chief development officer	35,310	32,922	+ 7.3%	36,130	28,641	+26.1%
Chief health-professions officer	—	—	—	64,114	30,229	+112.1%
Chief planning-and-budget officer	42,425	32,500	+30.5%	41,810	36,796	+13.6%
Chief planning officer	37,350	27,800	+34.4%	37,407	32,000	+16.9%
Chief public-relations officer	26,900	24,156	+11.4%	30,785	21,500	+43.2%
Chief student-affairs officer	34,100	36,060	− 5.4%	35,203	29,007	+21.4%
Administrator, grants and contracts	30,874	24,500	+26.0%	33,295	22,890	+45.5%
Administrator, hospital medical center						
Bursar	22,300	18,864	+18.2%	25,100	18,000	+39.4%
Comptroller	30,000	24,600	+22.0%	31,074	22,020	+41.1%
Registrar	25,500	24,596	+ 3.7%	28,600	19,647	+45.6%
Director, admissions	27,500	25,764	+ 6.7%	28,800	22,500	+28.0%
Director, admissions and financial aid	30,000	25,000	+20.0%	31,253	20,140	+55.2%
Director, affirmative action, equal employment	27,264	30,000	− 9.1%	30,729	27,315	+12.5%
Director, alumni affairs	22,000	20,000	+10.0%	25,000	18,310	+36.5%
Director, athletics	30,996	30,127	+ 2.9%	31,312	18,733	+67.1%
Director, athletics, women	25,650	19,692	+30.3%	22,163	25,650	−13.6%
Director, auxiliary services	29,900	30,560	− 2.2%	30,600	18,000	+70.0%
Director, bookstore	18,360	16,560	+10.9%	22,600	14,400	+56.9%
Director, campus recreation	22,333	16,000	+39.6%	22,746	18,500	+23.0%
Director, campus security	21,659	24,000	− 9.8%	21,840	20,473	+ 6.7%
Director, church relations	—	—	—	21,000	15,400	+36.4%
Director, community services	27,882	30,880	− 9.7%	30,800	23,500	+31.1%
Director, computer services	30,000	26,634	+12.6%	30,504	22,647	+34.7%
Director, development and alumni affairs	—	—	—	33,580	20,800	+61.4%
Director, educational-media services	23,652	23,469	+ 0.8%	24,660	18,403	+34.0%
Director, employee training	25,236	24,000	+ 5.1%	26,800	22,752	+17.8%
Director, food services	24,484	22,000	+11.3%	25,732	19,980	+28.8%
Director, foreign students	24,074	22,650	+ 6.3%	25,272	19,926	+26.8%
Director, information office	23,320	20,680	+12.8%	26,469	20,500	+29.1%
Director, information systems	35,000	25,000	+40.0%	35,900	24,000	+49.6%
Director, institutional research	29,890	26,640	+12.2%	32,000	23,201	+37.9%
Director, internal audit	29,000	25,260	+14.8%	29,364	22,847	+28.5%
Director, international-studies education	31,000	30,504	+ 1.6%	34,356	22,909	+50.0%
Director, learning-resources center	28,837	26,126	+10.4%	30,677	23,079	+32.9%
Director, legal services	41,268	40,112	+ 2.9%	42,096	35,000	+20.3%
Director, library services	28,990	26,000	+11.5%	31,493	23,940	+31.5%
Director, news bureau	—	—	—	24,100	18,460	+30.6%
Director, personnel and affirmative action	25,000	25,146	− 0.6%	28,297	20,760	+36.3%
Director, personnel and human resources	29,796	28,000	+ 6.4%	32,922	23,100	+42.5%
Director, physical plant	28,250	23,556	+19.9%	28,000	18,000	+55.6%
Director, publications	23,122	21,000	+10.1%	26,380	20,232	+30.4%
Director, purchasing	24,189	21,809	+10.9%	25,650	17,795	+44.1%
Director, risk management and insurance	—	—	—	28,548	26,800	+ 6.5%
Director, special and deferred gifts	—	—	—	28,000	22,400	+25.0%
Director, student counseling	27,080	26,000	+ 4.2%	28,140	23,310	+20.7%
Director, student financial aid	23,100	24,864	− 7.1%	25,296	18,638	+35.7%
Director, student health services						
Physician	47,465	31,390	+51.2%	47,680	40,000	+19.2%
Nurse	17,512	16,800	+ 4.2%	19,020	17,417	+ 9.2%
Director, student housing	21,000	18,696	+12.3%	22,600	17,000	+32.9%
Director, student placement	22,667	22,700	− 0.1%	25,000	19,425	+28.7%
Director, student union	24,000	24,141	− 0.6%	25,584	18,400	+39.0%
Dean, agriculture	48,072	39,200	+22.6%	—	—	—
Dean, arts and letters	—	—	—	39,500	37,500	+ 5.3%
Dean, arts and sciences	43,170	36,000	+19.9%	43,209	35,580	+21.4%
Dean, business	40,635	32,280	+25.9%	41,258	31,298	+31.8%
Dean, communications	—	—	—	35,833	29,333	+22.2%
Dean, continuing education	33,900	32,200	+ 5.3%	35,412	27,768	+27.5%
Dean, education	42,792	39,000	+ 9.7%	43,800	35,277	+24.2%
Dean, engineering	48,700	39,250	+24.1%	—	—	—
Dean, experimental programs	—	—	—	37,130	30,500	+21.7%
Dean, extension	36,134	37,000	− 2.3%	38,280	25,251	+51.6%
Dean, fine arts	38,848	39,882	− 2.6%	39,882	30,667	+30.0%
Dean, graduate programs	43,000	40,333	+ 6.6%	43,992	37,500	+17.3%
Dean, health-related professions	36,800	37,271	− 1.3%	41,400	33,744	+22.7%
Dean, home economics	—	—	—	49,500	38,511	+28.5%
Dean, humanities	33,082	33,868	− 2.3%	35,000	31,400	+11.5%
Dean, instruction	—	—	—	39,500	41,976	− 5.9%
Dean, library and information sciences	—	—	—	42,144	32,040	+31.5%
Dean, mathematics	31,490	31,500	0.0%	31,500	28,151	+11.9%
Dean, music	36,800	33,888	+ 8.6%	36,570	19,283	+89.6%
Dean, nursing	36,634	36,000	+ 1.8%	36,000	36,700	− 1.9%
Dean, sciences	36,100	35,886	+ 0.6%	36,379	32,264	+12.8%
Dean, social sciences	33,000	33,384	− 1.2%	33,470	30,600	+ 9.4%
Dean, social work	43,600	48,000	− 9.2%	43,600	46,622	− 6.5%
Dean, special programs	29,390	31,600	− 7.0%	29,074	29,390	− 1.1%
Dean, undergraduate programs	—	—	—	39,800	35,392	+12.5%
Dean, vocational education	35,330	35,258	+ 0.2%	35,630	31,759	+12.2%

— No data

SOURCE: COLLEGE AND UNIVERSITY PERSONNEL ASSOCIATION

Don't Let Guard Down in Hard Times: Lyman

CHRONICLE PHOTOGRAPH BY JOHN C. PHILLIPS

Richard W. Lyman

WASHINGTON

Colleges and universities may become so concerned with their economic survival that they will surrender their institutional freedoms, Richard W. Lyman, president of the Rockefeller Foundation, warned last week.

In a speech prepared for the annual meeting of the American Association for Higher Education here, Mr. Lyman said that institutional "concern for survival is certainly understandable" at a time "when a wolf 10 feet tall is salivating at the door."

However, he added, "when we are threatened is precisely the time to make sure that we don't lose sight of the essentials, such as the essential need to protect institutional freedoms."

He compared the current concern about financial problems with the concern about campus disruptions in the late 1960's and early 70's.

"It seems to me that many institutions suffered, back in the days of campus turmoil, from such a preoccupation with restoring peace to the campus that essential elements of a healthy academic life were sometimes bargained away," Mr. Lyman said. "We could do the same thing in response to financial peril, and it would be a tragic mistake."

He said institutions needed "to fight, every way we know how, against the powerful tendency, rooted in public pressures and our financial need, to become whatever it seems may be profitable in short-run material terms."

'Uneasy' over Report on Testing

Mr. Lyman, former president of Stanford University, also sharply criticized some of the recommendations in a recent report from the Commission on the Higher Education of Minorities, financed by the Ford Foundation (*The Chronicle*, February 3).

Specifically, Mr. Lyman took issue with the commission's recommendations that would have admissions officers place less emphasis on standardized tests and other traditional measures of academic performance when considering applicants from minority groups.

"When I encounter arguments for finding ways to play down academic requirements in favor of nonacademic ones, I am made uneasy," he said.

"To view the problem of minority education as rooted in a conspiracy located in Princeton in the vicinity of the Educational Testing Service is to trivialize the problem, and in a way that prevents serious discussion of it and cheats the very minority youth whose futures are at stake."

He added, "The enemy of full access to higher education is not testing, it is grossly and persistently inadequate education at the lower levels, together with the poverty and degradation of life in too many population centers."

"There are no easy solutions," Mr. Lyman added, "and urging admissions officers to be more ingenious about how to compensate for shortcomings isn't a solution at all."

—MALCOLM G. SCULLY

Mail-Order-Diploma Operation Shut Down by Postal Service

OKLAHOMA CITY

The U.S. Postal Service has closed two post-office boxes used in a mail-order-diploma scheme so sophisticated that its fictitious colleges were backed by fake accrediting agencies. But inspectors have not yet tracked down the scheme's operators.

"We have every reason to believe that it has elements of organized crime," said Dan Hobbs, vice-chancellor for planning and policy research at the Oklahoma Regents for Higher Education. He said the mail-order scheme had been traced to at least four other states—Georgia, Missouri, Ohio, and Tennessee.

He said the regents' staff had started working with postal inspectors several years ago, when inquiries from personnel offices began arriving at the regents' headquarters here.

The operation was promoted in national magazines, Mr. Hobbs said, with advertisements promising to award "college degrees for life experience." He added that it "would sell you anything from a high-school diploma to a minister's license to a Ph.D. in engineering."

Prices ran from about $75 for a full college transcript—"It would show every course you took and the grade you got in it," Mr. Hobbs said—to $400 to $500 for a Ph.D.

The scheme operated with at least five names, he said. They were American Western University, the National College of Arts and Sciences, the Northwestern College of Allied Science, Regency College, and St. Paul's Seminary.

Whoever devised the operation also invented two accrediting agencies to back it, Mr. Hobbs said. They were called the National Association of Open-Campus Colleges and the Midwestern States Accreditation Agency. "It's a beautiful touch—a tribute to the education industry," he said.

Advertisements for the colleges even carried alleged endorsements from several real educators. When reached by the regents' staff, however, the educators said they had approved of nothing more specific than the concept of universities without walls, and had never heard of any of the five universities, Mr. Hobbs said.

After the Postal Service determined on the basis of a hearing that the operation was fraudulent, it closed the two post-office boxes from which applications and checks were collected. The post-office boxes had been rented by a business called Disciples of Truth, Inc.

No criminal charges have been brought so far, Mr. Hobbs said.

—LAWRENCE BIEMILLER

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News Summary

Articles on inside pages

Some foundations are discussing ways to save small private colleges endangered by federal cuts in education aid. Story on Page 4.

The New York Times has decided that its name will not be used in the title of future editions of a controversial guide to colleges. Story on Page 3.

North Carolina's supreme court says the University of North Carolina's board of governors can't regulate programs offered by out-of-state institutions. Story on Page 4.

A West Virginia college almost closed its doors a few years ago, but now its budget is balanced and enrollment is growing. Story on Page 5.

State education leaders expect retrenchment to continue on the campuses for the next few years, a survey finds. Story on Page 7.

The president of Northwestern University has refused to give data on individual faculty members' salaries to an accrediting team evaluating its school of journalism. Story on Page 8.

The nation's historic records are endangered by President Reagan's cuts in the budget of the National Archives, scholars have warned Congress. Story on Page 11.

Two Congressional committees have urged rejection of President Reagan's proposed cuts for education programs next year. Story on Page 13.

Chinese scientists are freer from government control than they've been since the Cultural Revolution. Story on Page 15.

Muncie, Ind., is so ordinary that it has become a "sociological laboratory." Story on Page 19.

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Colleges Advised They Need Not Declare 'Exigency' to Lay Off Tenured Professors

Administrators at ACE seminars are told they may be unnecessarily limiting their options

By ROBERT L. JACOBSON

WASHINGTON

Most colleges and universities can exercise much more discretion than they realize in laying off tenured faculty members, says a lawyer who has been advising dozens of academic administrators in recent months under the aegis of the American Council on Education.

The lawyer, David J. Figuli, former chief legal counsel for the Montana University System and former general counsel for the South Dakota board of regents, also maintains that many institutions may be unnecessarily limiting their legal options by relying primarily on declarations of "financial exigency" as the basis for terminating faculty appointments.

In many cases, he says, college officials may be legally required to do little more than show that—for any one of several reasons beyond their immediate control—they have had to discontinue an instructional program and thus end the employment of certain faculty members.

As long as the officials have not acted arbitrarily or capriciously, or failed to provide due process, Mr. Figuli says, such dismissals are unlikely to be overturned by the courts.

Excerpts from two policy statements on laying off tenured professors—one by the South Dakota Board of Regents and one by the American Association of University Professors—will be found on Page 10.

His advice runs counter to the long-standing position of the American Association of University Professors.

The association's widely endorsed 1940 *Statement of Principles on Academic Freedom and Tenure* says that, except for "adequate cause" or retirement, tenured faculty members can lose their jobs "only under extraordinary circumstances because of financial exigencies."

Related regulations recommended by the A.A.U.P. have led many colleges to agree that tenured faculty members cannot be let go without cause unless the board of trustees first declares a state of financial exigency.

Mr. Figuli, who specializes in litigation and labor relations at a small law firm in Ohio, bases his contrary view on court rulings in various jurisdictions over the past eight years, and especially on a little-noticed decision last summer by the U.S. Court of Appeals for the First Circuit in a suit against Humacao University College of the University of Puerto Rico.

The case involved two tenured professors of physical education whose jobs were eliminated by the institution's governing council in 1978 after it determined that en-

Continued on Page 16, Column 1

U.S. Seeks to Limit Number of Students Who Qualify for Aid as 'Self-Supporting'

By JANET HOOK

WASHINGTON

With more and more students declaring themselves financially independent of their parents when they apply for federal grants and loans, the Department of Education is drafting new regulations to make it harder to qualify as self-supporting.

The department wants more stringent criteria to meet a concern, shared by many campus officials, that some students are prematurely claiming financial independence to qualify for more aid than they would receive if their parents' income were taken into account.

At a time when federal resources are dwindling, some campus and government officials fear that aid is being diverted from needy students to those who could rely on parental support but have found it convenient or profitable to take the relatively easy steps required to be considered independent.

Other financial-aid officials and student advocates contend that reports of students' establishing "independence of convenience" simply to get more aid are exaggerated.

"It's not so much of a problem that we have to make it impossible for genuinely independent students to get the aid they need," said Edward R. Hanley, legislative director of the United States Student Association. "The real goal [of the Education Department] here is to save money and to cut students out of financial-aid programs."

Under existing federal rules, students are classified as independent if they:

- ▶ Are not claimed as a dependent on their parents' federal income-tax forms.
- ▶ Do not receive more than $1,000 in support from their parents.
- ▶ Do not live with their parents for more than six weeks a year.

Those criteria must be met both in the year in which the student applies for aid and in the previous year.

Under those rules, some student-aid officials contend, middle- and upper-income

Continued on Page 14, Column 1

Proposed Changes in Secrecy Rules Alarm Scientists

By KIM McDONALD

WASHINGTON

A proposed executive order that would make it easier for the government to classify results of scientific research and allow such information to remain hidden from the public indefinitely could have "frightening" consequences for university researchers if signed by President Reagan.

That is the conclusion of representatives of scientific associations, public-interest groups, and scholars specializing in national-security issues.

"If this executive order is, in fact, signed and issued in its present version," said William D. Carey, executive officer of the American Association for the Advancement of Science, "much of the normal discourse of science will be silenced and progress arrested.

"If we then doubled the federal dollars for basic research, I do not think it would make up our losses."

The Defense Department has been advised to clarify national-security restrictions on research. Story on Page 11.

A draft of the proposed order that has been circulated on Capitol Hill specifically states that "scientific, technological, or economic matters relating to the national security," and research in cryptology, the mathematical science of making and breaking secret codes, can be classified by government officials.

While a Pentagon official said federal regulations already allowed the Defense Department to classify such research in the interest of national security, Mr. Carey said that, with the exception of research in nuclear fusion and fission related to weap-

Continued on Page 12, Column 1

Officials See State Funds for Colleges Lagging Over the Next 3 Years

DENVER

Even before the latest round of proposed federal budget cuts for colleges and their students, most state political leaders and higher-education officials were expecting state appropriations for both public and private institutions to trail the rate of inflation over the next three years.

The most likely results, the officials indicated in a national survey, are that tuition will rise, campus maintenance will be deferred, staffs will be cut, capital outlays for construction will decline, and academic programs will be trimmed—in short, a continuation of the widespread retrenchment already under way.

At the same time, survey participants said that the quality of education was the the most important higher-education issue facing state policymakers. Basic skills and remedial education were identified as the next most important issue.

The survey, conducted last fall by the Education Commission of the States, produced usable responses from 214 officials, including 48 governors or members of their staffs, 81 chairmen of state education and appropriation committees or their principal aides, and 52 state higher-education executive officers or members of their staffs. A group of 33 state budget chiefs and other officials also participated.

A 'Broad Consensus'

In a report to be published here this week, Gordon B. Van de Water, a policy analyst for the commission's Education Finance Center, said a striking conclusion from the survey was that a "broad consensus" existed among state leaders on what the top issues were. The same concerns were on "nearly everyone's list," he said.

Besides quality and remedial education, the top-rated issues were renovation or replacement of the physical plant, public-college "tuition levels," and the effect of changes in federal student-aid programs.

Mr. Van de Water said the emphasis on quality suggested that debates about it would become "increasingly prevalent at the state level and . . . increasingly coupled with budgetary decisions."

Over all, about 72 per cent of the respondents predicted that state appropriations for higher education would fail to keep pace with inflation, and 94 per cent of those officials said they expected tuition to rise.

At least two-thirds of those who forecast lagging appropriations also said they expected colleges to suffer cuts in maintenance, personnel, capital outlays, and academic programs.

Asked to predict how their states would react to reductions in federal student aid, 70 per cent of the state officials indicated that the states would expect families to increase their contributions toward college costs.

There were differences among the respondents, however, over the pace of anticipated tuition increases. More than a fourth of the officials from governors' and legislators' offices said tuition would rise faster than the inflation rate over the next five years, but only about one-eighth of the education officials agreed.

In addition, nearly half of all respondents said they thought current tuition levels at public colleges and universities were "about right."

'A Pincer Movement'

Still, Mr. Van de Water observed, "state policy leaders are definitely concerned about the impact of recent funding restrictions in federal student-assistance programs and the likelihood of deeper cuts ahead. These actions create a pincer movement on family finances that threatens to reduce access to college unless states can provide substantially more assistance (a questionable possibility)."

He also noted that the need for renovation of buildings was becoming critical on many campuses. Yet more than half of all survey respondents said they expected such activities to be postponed further because of insufficient funds.

The officials were asked who they thought would determine the areas of higher education to be cut if state appropriations were inadequate.

In most categories, they said the colleges and universities themselves would make the decisions. That was especially true in the case of deferred maintenance, staff reductions, and program cuts.

There were some exceptions, however. Decisions to raise tuition or limit enrollment, for example, were expected to be made primarily by state agencies, the survey showed. In addition, governors and legislators expected to have a greater say in those choices than state education officials thought the political leaders would have.

The survey report will be published in Volume 8, Number 1 of the E.C.S. periodical *Higher Education in the States*. Single copies are available for $5 from the Education Commission of the States, 1860 Lincoln Street, Denver 80295.

—ROBERT L. JACOBSON

How State Leaders View the Future of Higher Education

	Governors	Legislators	Educators
Expected enrollment trends in next three years:			
Increase	14.7%	24.1%	2.6%
Decrease	23.5%	22.2%	12.8%
Expected to vary by type of institution	61.8%	53.7%	84.6%
Community colleges			
Increase	89.5%	84.6%	67.7%
Decrease	0.0%	3.8%	9.7%
State colleges			
Increase	11.8%	29.2%	11.1%
Decrease	64.7%	45.8%	77.8%
State universities			
Increase	14.3%	29.6%	12.9%
Decrease	38.1%	22.2%	9.7%
Independent colleges			
Increase	0.0%	11.5%	6.9%
Decrease	83.3%	65.4%	55.2%
Proprietary institutions			
Increase	29.4%	22.7%	27.3%
Decrease	35.3%	22.7%	18.2%
Enrollment not expected to be an issue	25.5%	22.5%	21.2%
Expected state response to reductions in federal student aid:			
Increases in state grants	14.9%	16.3%	30.8%
Increases in institutional support	8.5%	13.8%	9.6%
Increases in contributions expected from students' families	51.1%	68.8%	76.9%
New state loan programs	8.5%	11.3%	17.3%
Expansion of existing state loan programs	25.5%	37.5%	32.7%
Other action	12.8%	5.0%	9.6%
No action	38.3%	18.8%	23.1%
Impression of public-tuition levels:			
Too high	12.2%	10.5%	13.0%
About right	46.3%	54.0%	58.7%
Too low	41.5%	35.5%	28.3%

	Governors	Legislators	Educators
Impression of state financial aid to students:			
Too high	4.3%	2.5%	4.0%
About right	63.8%	55.6%	44.0%
Too low	31.9%	40.7%	52.0%
Expect higher-education appropriations to lag behind inflation in the next three years	70.8%	72.8%	69.2%
Anticipated result of lag in appropriations:			
Program cutbacks	61.8%	62.7%	77.8%
Enrollment limits	50.0%	30.5%	44.4%
Hiring freeze	44.1%	33.9%	50.0%
Deferred maintenance	64.7%	59.3%	88.9%
Reduction in staff	61.8%	67.8%	80.6%
Increase in tuition	85.3%	93.2%	100.0%
Reduced capital spending	61.8%	67.8%	75.0%
Other	8.8%	8.5%	33.3%
Closings, mergers, or sharing of resources expected to be an issue	72.3%	65.0%	78.0%
Preferred priority:			
Sharing institutional resources	73.3%	72.0%	78.1%
Mergers	10.0%	20.0%	18.8%
Closings	16.7%	8.0%	3.1%
Changes in quality of higher-education system:			
In the past five years:			
Improved	45.7%	43.6%	42.3%
Stayed the same	43.5%	44.9%	34.6%
Declined	10.9%	11.5%	23.1%
In the next five years, quality should be:			
Improved	59.6%	79.8%	84.6%
Maintained	40.4%	20.3%	15.4%
Reduced	0.0%	0.0%	0.0%

SOURCE: GORDON B. VAN DE WATER, EDUCATION COMMISSION OF THE STATES

Pretrial Schedule Is Announced in AIAW's Antitrust Suit Against NCAA

WASHINGTON

A federal district judge has set a pretrial schedule for the antitrust lawsuit filed by the Association for Intercollegiate Athletics for Women against the National Collegiate Athletics Association.

Lawyers for the groups are to have their written testimony and other documents ready in May, with a trial likely in the summer or fall.

But Judge Charles Richey of the U.S. District Court for the District of Columbia ordered the groups to try to work out some sort of merger or other out-of-court settlement before then.

The women's organization is to submit a settlement proposal to the N.C.A.A. by April 3, and the N.C.A.A. is to respond by April 18. The judge ordered that the attempt be made despite the fact that both groups told him they had discussed the idea of merger several times in the past without ever agreeing on anything.

The A.I.A.W. decided to proceed with its antitrust suit after failing to persuade Judge Richey, and later the U.S. Court of Appeals for the District of Columbia Circuit, to grant an emergency injunction banning the program of women's championships begun by the N.C.A.A.

Margot Polivy, a lawyer for the women's association, said that because no injunction had been granted, the group had not sent out membership applications for academic 1982-83 and "would probably not be in business in the fall." She said, however, that if the A.I.A.W. won its lawsuit, it might be able to resume operations the following year.

The association has charged that the N.C.A.A. violated antitrust laws by using profits from its nationally televised men's sports programs to subsidize a $3-million program of women's championships, which the A.I.A.W. could not match.

As a result, the women's organization said it could not continue beyond the current academic year because it had lost members, championship sites, and crucial revenue from a contract with NBC.

The N.C.A.A. denied the allegations, saying that antitrust laws were designed to encourage competition and that it was trying to expand competitive opportunities for female athletes. It also argued that its member institutions had approved the women's program, and that "the antitrust laws were not intended to govern noncommercial policy disputes resolved by majority vote of the institutional members of voluntary, nonprofit educational associations."

—CHERYL M. FIELDS

'Academic Trust Fund,' Financed by TV Income, Proposed for College Athletes

NEW YORK

The National Collegiate Athletic Association has been asked to establish an "academic trust fund" for college athletes.

Proposed by a fledgling organization called the Center for Athletes' Rights and Education (CARE), the fund would be used to help athletes complete work on their undergraduate degrees and to expand the N.C.A.A.'s postgraduate-scholarship program. It would be financed by a portion of the revenue earned by N.C.A.A. institutions from television contracts.

The idea was given a chilly reception when it was first presented to N.C.A.A. members at the association's annual convention in January. Most of the members approached about the proposal said it was not needed, because many institutions had already established such funds for their athletes.

One of the few N.C.A.A. officials who sympathized with the efforts of CARE was M. Maceo Nance, Jr., president of South Carolina State College, who introduced the proposal as a "resolution," which does not carry the weight of a new rule. Mr. Nance withdrew the resolution before it came to a vote, however, after other N.C.A.A. members pointed out technical flaws in its language.

Lobbying Effort Begun

Allen Sack, director of CARE, said in a recent interview that he had left the convention "demoralized," but that he intended to begin an intensive lobbying campaign to promote the proposed fund.

Recently, he sent a telegram to Walter Byers, executive director of the N.C.A.A., asking to meet with officials of the association about the trust fund and several other concerns.

The center, which is based in New York, is attempting to develop a network of groups on campuses around the country to advocate ending the "exploitation" of athletes and giving them "fair compensation for the work that they do."

"We think the bureaucracy of the association will oppose everything we try to do," Mr. Sack said in the interview. "But we do believe there is a constituency of N.C.A.A. members out there who recognize the need to do more for their athletes and are willing to move in that direction."

—LORENZO MIDDLETON

FACT-FILE

Endowments of 192 Colleges Ranked by 1981 Value

1980 Rank	Institution	Market Value June 30, 1980	Market Value June 30, 1981
1.	Harvard University	$1,584,580,000	$1,713,350,000
2.	University of Texas	1,261,320,000	1,485,090,000
3.	Yale University	668,800,000	792,600,000
4.	Princeton University	547,750,000	685,763,000
5.	Stanford University †	557,740,000	598,990,000
6.	Columbia University	553,000,000	590,400,000
7.	Massachusetts Institute of Technology	421,258,000	500,237,000
8.	University of Chicago	342,300,000	397,100,000
9.	Rice University	329,035,000	376,865,000
10.	Cornell University	328,696,000	360,441,000
11.	Northwestern University	275,238,000	320,552,000
12.	New York University †	281,473,000	276,351,000
13.	Rockefeller University	228,563,000	270,568,000
14.	Washington University	238,613,000	266,579,000
15.	Emory University †	265,818,000	252,859,000
16.	Johns Hopkins University	198,063,000	242,430,000
17.	Dartmouth College	197,609,000	234,055,000
18.	University of Pennsylvania	224,510,000	232,667,000
19.	University of Notre Dame	172,222,000	218,243,000
20.	California Institute of Technology	187,632,000	202,090,000
21.	University of Virginia	152,311,000	179,697,000
22.	Vanderbilt University	154,493,000	174,715,000
23.	Duke University	135,082,000	153,950,000
24.	McGill University	145,200,000	153,200,000
25.	University of Delaware	131,915,000	143,996,000
26.	Case Western Reserve University	125,207,000	142,286,000
27.	Brown University	123,356,000	139,484,000
28.	Wesleyan University	116,804,000	134,395,000
29.	Wellesley College	131,953,000	133,192,000
30.	Carnegie-Mellon University	119,195,000	132,468,000
31.	Smith College	108,614,000	129,126,000
32.	Swarthmore College	91,016,000	117,066,000
33.	Williams College	96,805,000	117,044,000
34.	Southern Methodist University ‡	101,552,000	116,855,000
35.	University of Michigan	106,128,000	116,482,000
36.	University of Minnesota	105,986,000	113,867,000
37.	University of Pittsburgh	103,937,000	113,216,000
38.	Vassar College	86,445,000	104,834,000
39.	Rensselaer Polytechnic Institute	93,404,000	103,943,000
40.	University of Cincinnati	90,121,000	103,612,000
41.	Oberlin College	93,064,000	103,102,000
42.	Berea College	86,536,000	97,534,000
43.	Amherst College	83,975,000	95,009,000
44.	University of Richmond	77,536,000	88,133,000
45.	Baylor University	not reported	87,500,000
46.	Grinnell College	43,332,060	85,552,000
47.	The Ohio State University	76,342,000	84,794,000
48.	Loyola University of Chicago	65,156,000	83,615,000
49.	Wake Forest University	65,526,000	77,589,000
50.	Lehigh University	61,924,000	72,980,000
51.	Pomona College	58,913,000	72,530,000
52.	Brandeis University	67,009,000	72,528,000
53.	Georgetown University	66,195,000	71,844,000
54.	Lafayette College	59,952,000	71,558,000
55.	Middlebury College	60,019,000	70,211,000
56.	Rochester Institute of Technology	53,549,000	64,656,000
57.	Carleton College	53,970,000	61,966,000
58.	State U. of New York, Buffalo	57,613,000	61,478,000
59.	Mount Holyoke College	58,20[illegible],000	61,449,000
60.	Boston University	46,171,000	60,898,000
61.	Wabash College	not reported	59,589,000
62.	Thomas Jefferson University	52,825,000	58,995,000
63.	Syracuse University	53,400,000	58,816,000
64.	Academy of the New Church	40,901,000	55,797,000
65.	Bryn Mawr College ‡	45,336,000	55,521,000
66.	Bowdoin College	46,507,000	55,303,000
67.	University of Illinois	19,557,000	52,672,000
68.	Earlham College	43,890,000	49,719,000
69.	Hamilton College	41,241,000	49,658,000
70.	University of Miami ‡	38,546,000	47,707,000
71.	Tufts University	not reported	47,249,000
72.	Trinity College (Conn.)	42,992,000	47,181,000
73.	Occidental College	37,743,000	46,555,000
74.	Baylor College of Medicine	30,787,000	45,470,000
75.	Cooper Union	39,750,000	44,393,000
76.	Colorado College	31,534,000	44,181,000
77.	University of North Carolina	not reported	43,605,000
78.	University of Wisconsin System	37,453,000	43,267,000
79.	Rutgers, The State U. of New Jersey	32,407,000	42,601,000
80.	Worcester Polytechnic Institute	38,085,000	41,547,000
81.	Bucknell University	35,611,000	41,254,000
82.	Radcliffe College	not reported	40,347,000
83.	Colgate University ‡	34,904,000	39,653,000
84.	Haverford College	33,052,000	38,179,000
85.	Southwestern University	not reported	37,915,000
86.	Hampton Institute	32,356,000	36,656,000
87.	Agnes Scott College	35,339,000	35,487,000
88.	Drew University	28,265,000	34,062,000
89.	University of Missouri	30,445,000	34,027,000
90.	University of Vermont	25,665,000	32,006,000
91.	Whitman College	28,262,000	31,760,000
92.	Claremont McKenna College	25,155,000	31,516,000
93.	Colby College	26,352,000	29,367,000
94.	University of Santa Clara	21,641,000	28,402,000
95.	Davidson College	25,263,000	27,656,000
96.	Lawrence University (Wisc.)	not reported	27,369,000
97.	Austin College ‡	not reported	27,152,000
98.	Ohio University	25,758,000	27,050,000
99.	University of Denver	$23,946,000	$27,014,000
100.	Teachers College, Columbia U. ‡	25,283,000	26,465,000
101.	Barnard College	not reported	25,880,000
102.	University of Alabama System	not reported	25,795,000
103.	Berry College	21,156,000	25,535,000
104.	Rhode Island School of Design	19,135,000	24,556,000
105.	University of Tennessee-Knoxville	not reported	24,165,000
106.	College of Wooster	20,229,000	24,033,000
107.	Simmons College	19,292,000	22,014,000
108.	Denison University	18,095,000	21,923,000
109.	George Washington University	19,064,000	21,834,000
110.	Spelman College	14,460,000	21,610,000
111.	Sweet Briar College	19,912,000	20,946,000
112.	University of Maryland	17,574,000	20,714,000
113.	University of Wisconsin Foundation	15,737,000	20,281,000
114.	Marquette University	17,588,000	19,827,000
115.	Cornell College	17,439,000	19,280,000
116.	Hendrix College *	18,474,000	18,926,000
117.	Ohio Wesleyan University	17,418,000	18,849,000
118.	Pennsylvania State University	15,479,000	18,320,000
119.	Wheaton College (Mass.)	16,119,000	17,656,000
120.	Dickinson College	17,426,000	17,625,000
121.	Clark University	14,900,000	17,289,000
122.	Coe College	not reported	16,886,000
123.	University of Utah	not reported	16,883,000
124.	Reed College	13,293,000	16,786,000
125.	Wittenberg University	11,420,000	16,457,000
126.	Alma College	13,310,000	16,455,000
127.	Franklin and Marshall College	12,883,000	16,218,000
128.	Michigan State University	14,231,000	15,798,000
129.	Furman University	13,269,000	15,762,000
130.	University of Tennesse-Chattanooga	not reported	15,614,000
131.	Oregon State Board of Higher Ed.	15,086,000	15,377,000
132.	University of Puget Sound †	13,707,000	15,088,000
133.	Baldwin-Wallace College	12,740,000	14,894,000
134.	Kalamazoo College	12,943,000	14,805,000
135.	Wentworth Institute of Tech.	not reported	14,577,000
136.	University of Arizona	11,607,000	14,367,000
137.	Connecticut College	9,185,000	14,046,000
138.	Allegheny College	12,234,000	13,659,000
139.	University of Tulsa	11,856,000	13,537,000
140.	Indiana University	12,160,000	13,452,000
141.	Norwich University	not reported	12,849,000
142.	Temple University	11,707,000	12,722,000
143.	C. of William and Mary Association	not reported	12,204,000
144.	University of Maine	10,489,000	11,983,000
145.	Drake University ‡	12,086,000	11,875,000
146.	University of Dayton	8,997,000	11,403,000
147.	Washburn College	11,027,000	11,403,000
148.	Mercer University	10,272,000	11,357,000
149.	Whittier College	not reported	10,999,000
150.	Kenyon College	8,792,000	10,856,000
151.	Georgia Institute of Technology	10,758,000	10,810,000
152.	Hobart and William Smith Colleges	8,604,000	10,704,000
153.	University of Iowa Foundation	not reported	9,740,000
154.	Muhlenberg College	8,744,000	9,045,000
155.	University of Arkansas	5,895,000	9,005,000
156.	Saint Norbert College	8,099,000	8,659,000
157.	Saint Mary's College (Ind.)	not reported	8,645,000
158.	Wells College	not reported	8,500,000
159.	North Carolina State University	not reported	8,408,000
160.	Alfred University	6,683,000	8,089,000
161.	Ohio Northern University	7,277,000	7,684,000
162.	Babson College	not reported	7,441,000
163.	Doane College	6,096,000	7,333,000
164.	Rollins College	not reported	7,314,000
165.	Skidmore College	not reported	7,288,000
166.	University of Nebraska	6,669,000	7,148,000
167.	University of Scranton	not reported	6,781,000
168.	Clarkson C. of Technology	6,324,000	6,603,000
169.	Augustana College	not reported	6,527,000
170.	Hope College	5,191,000	6,490,000
171.	Carroll College	5,866,000	6,102,000
172.	Moravian College	not reported	6,027,000
173.	Loras College	not reported	6,013,000
174.	University of Evansville	6,312,000	5,936,000
175.	American University	5,306,000	5,818,000
176.	College of William and Mary	not reported	5,529,000
177.	Washington State University	4,811,000	5,351,000
178.	Medical College of Pennsylvania	4,960,000	5,212,000
179.	University of Akron	3,580,000	3,940,000
180.	University of Oregon Foundation	2,737,000	3,683,000
181.	Philadelphia C.of Textiles and Science	3,522,000	3,599,000
182.	Canisius College	not reported	3,538,000
183.	Chapman College ‡	2,925,000	3,157,000
184.	University of Tampa	2,286,000	2,928,000
185.	Trinity College (D.C.)	1,367,000	2,639,000
186.	Western Michigan University	1,484,000	2,564,000
187.	Arizona State University	2,815,000	2,325,000
188.	Newberry College	2,221,000	2,055,000
189.	Eastern Michigan University	1,637,000	1,938,000
190.	University of Mississippi	1,585,000	1,850,000
191.	University of Connecticut	1,778,000	1,833,000
192.	Monmouth College	1,398,000	1,472,000

† As of August 31
* As of July 31
‡ As of May 31

Note: Table includes only institutions participating in the voluntary comparative-performance study by the National Association of College and University Business Officers.

Northwestern Denies Faculty-Salary Data to Accrediting Team

EVANSTON, ILL.

Northwestern University, an early advocate of specialized accreditation for journalism education, has lost an opportunity to have accreditation continued for its own Medill School of Journalism, apparently because of a dispute over a request that it disclose the salaries of individual faculty members.

Sources connected with journalism accreditation suggested, however, that broader issues were involved, including questions about the amount of ~~credit~~ Northwestern gives students for off-campus internships, and the status of its undergraduate program.

The controversy came to a head three weeks ago, in the middle of a scheduled four-day inspection of the school's graduate program by a team from the Accrediting Council on Education in Journalism and Mass Communications.

Saying the university's policy precluded its compliance with a team request for the salary data, Northwestern President Robert H. Strotz abruptly ended the team's visit and withdrew a request for re-evaluation of the graduate program.

Mr. Strotz said the provost, Raymond W. Mack, had told him the panel considered the data "essential."

In a letter to Reed Sarratt, chairman of the visiting team, the president also noted that the school had already provided the team with "detailed information on median salaries" in journalism and other university divisions.

Mr. Strotz's action was tantamount to surrendering the school's accreditation, he acknowledged last week, saying that he and Mr. Mack planned to "put together an outside group" to evaluate the school.

Request Called Inappropriate

Mr. Strotz accused the council of seeking irrelevant and inappropriate information. He said he had recently become "better informed about accrediting practices" as a board member of the Council on Postsecondary Accreditation, a national coordinating body, and he charged that some specialized accrediting agencies seemed more interested in "gaining higher salaries and better working conditions" for faculty members than in assessing the quality of a program.

Douglas Ann Newsom, chairman of the council's accrediting committee, said it sought information on individual salaries "to be sure there's no discrimination based on racial origin or sex." She said the council kept such information confidential.

I. W. Cole, dean of Medill, called Mr. Strotz's dismissal of the accrediting team "quite reasonable." In a memorandum to students and faculty members, he expressed "regret" that the team had been prevented from completing its work, but he said the situation would have "no effect on our relationships with the professions our students enter."

Mr. Cole said in an interview that Northwestern was "a solid and stable" institution, and that "it's not important to us" to be accredited by the journalism council.

Implications that the salary issue was the only basis for Mr. Strotz's dismissal of the visiting team were disputed by Mr. Sarratt and Ms. Newsom. Mr. Sarratt said the lack of accreditation of Northwestern's undergraduate journalism program was "the real nub of the difficulty." Ms. Newsom said there had been no "insistence" by visiting-team members that they be given the salary data, "yet they were dismissed" by Mr. Strotz. "There was something else going on there," she said.

Northwestern's graduate program in journalism has been accredited since 1948. —ROBERT L. JACOBSON

3/24/82

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News Summary

Articles on inside pages

Freshman applications at private colleges and universities are lagging nearly 2 per cent behind last year's, the Chronicle Survey finds. Story on Page 6.

Researchers at the University of Wisconsin don't have to disclose an unfinished study subpoenaed in a lawsuit, a federal court rules. Story on Page 3.

Female athletes and coaches at Washington State University, denied equipment and services comparable to those given to their male counterparts, have been awarded unspecified damages. Story on Page 6.

Dental educators fear growing student indebtedness could exacerbate a drop in students applying to dental school. Story on Page 6.

A federal judge has refused to find the Education and Labor Departments in contempt of court, even though they violated his orders for resolving bias complaints. Story on Page 9.

The Justice Department has reaffirmed the government's position that Title IX applies to colleges if their students receive federal grants. Story on Page 9.

The Defense Department has recommended that Congress reject proposals to establish a new GI Bill. Story on Page 9.

Some scholars believe biography is experiencing a renaissance, but others are not so sure. Story on Page 19.

A group of Israeli students is opposing the government's plans to withdraw from the Sinai Peninsula under the Camp David agreements. Story on Page 15.

Fewer Chinese students and scholars will be coming to the U.S. in the future, says a new report. Story on Page 15.

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Bureaucratic Tie-Ups Delay Student Aid

Government a month late in allocating funds; loan program stalled in absence of new rules

By JANET HOOK

WASHINGTON

Administrative delays in the Department of Education are making it difficult for colleges to tell students how much federal aid they can count on next year.

Although the department began processing applications for Pell Grants for academic 1982-83 last week—several weeks behind schedule—officials are moving slowly to issue new regulations for Guaranteed Student Loans, the government's largest aid program. That is preventing banks and colleges from processing loan applications from students who need help this summer or next fall.

No Word Until April

It will be April—a month later than usual—before the department tells colleges how much money they will receive in 1982-83 under three "campus-based" aid programs—Supplemental Educational Opportunity Grants, College Work-Study, and National Direct Student Loans.

The administrative tie-ups compound the uncertainty generated by Congressional debate about possible cuts in federal spending on student aid.

Although the drastic cutbacks proposed by President Reagan for fiscal 1983 would not affect students until academic 1983-84, the Administration has also asked Congress to make additional cuts in funds for the current fiscal year, which would affect awards to students in 1982-83.

In recent years, the operation of the government's complex student-aid programs has often been plagued by confusion and delays caused by budgetary uncertainties and by frequent revision of the rules for administering the programs. But, because they have affected virtually every aid program in the Department of Education, the delays are causing more trouble

Continued on Page 13, Column 1

A New Academic Disease: Faculty 'Burnout'

Symptoms: physical and emotional exhaustion —and a feeling of being 'professionally stuck'

By BEVERLY T. WATKINS

NEW YORK

▶ Robert D. Khmer has been the academic dean at Orthodox State University for the last seven years. He taught in a liberal-arts college before coming to Orthodox, but he has spent most of his academic life in administration.

"It was exciting at first," he says. "The job was new and as a dean I was always in the middle of things. Then in 1977 the trustees hired a new president who sort of turned over the college to Henry, the provost, and me. The president's been working the outside, and we've been taking care of the inside."

Now, says Mr. Klimer, "Henry has found himself a presidency and the provost's search committee has recommended a new provost from Wisconsin. I'm very disappointed. I've been a good dean and I deserved the promotion. I was the guy who designed a student-registration system that works and I reorganized the general-education program.

"I'm not sure I want to be dean anymore. There's no challenge in that. I've already been a dean. And now starting over with a new provost will make me have to prove myself all over again. I'm really tired of this. It's getting more difficult to get started in the mornings."

After a pause, he adds, "Maybe it'll be a blessing not being provost. But I did deserve it. I wonder how much I'll be listened to in this new administration? I'm not certain what to do now. Maybe I should begin to look at other colleges."

▶ Barbara Laborsworth, who has taught in the English department at Normal College for four years, is waiting for her tenure vote next fall. Of the 11 faculty members in the department, 7 already have tenure and the word is out

Continued on Page 8, Column 1

VIOLENCE IN PUERTO RICO

A peaceful gathering of student musicians at the University of Puerto Rico . . .

soon turned into a violent confrontation . . .

as plainclothes policemen, brandishing clubs . . .

HÉCTOR DÍAZ VELÁZQUEZ

sought to disperse the players. A student strike over tuition lasted five months. Story on Page 4.

CHRONICLE SURVEY

Freshman Applications Down from '81

The number of freshman applications received by private colleges and universities continues to lag behind last year's figure, the Chronicle Survey has found. At public institutions, the average number of applications appears to be up only slightly.

As of January 31, applications to private institutions were down 1.9 per cent from the same date in 1981. At public institutions, the average number of applications was up only 0.8 per cent.

The survey, using data from 286 four-year colleges and universities, found 50.8 per cent of the private institutions and 42.2 per cent of the public institutions had fewer freshman applications at the end of January than they had had a year earlier.

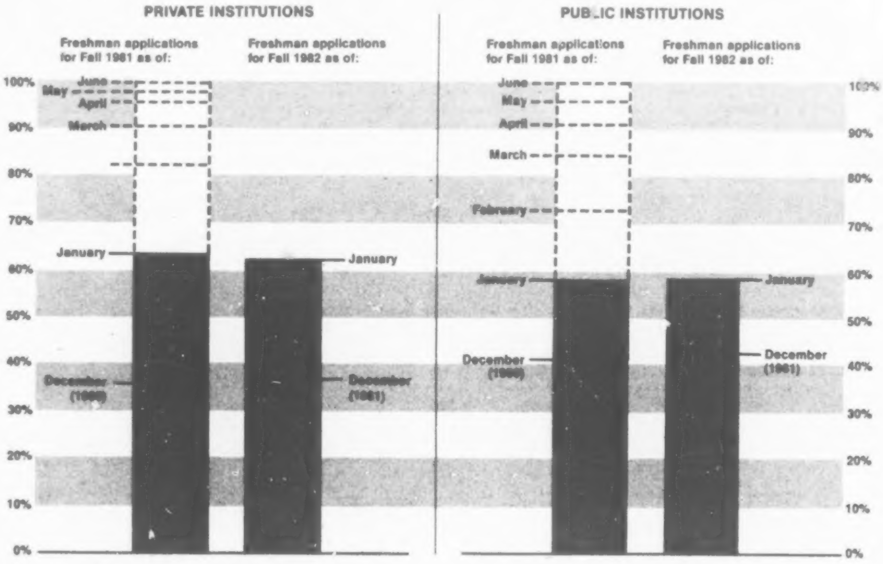
One in every four private institutions reported a decline of more than 10 per cent compared with last year. The largest declines were reported by small private colleges and by institutions in the Southeastern states.

Last year, private institutions had received nearly two-thirds of their freshman applications by the end of January, and public institutions had received well over half of theirs.

At the end of last year's application season, the number of applications was up 7 per cent over the previous year's total, according to the Chronicle Survey.

The National Center for Education Statistics estimated that total college enrollment last fall was up 1.9 per cent compared with the fall of 1980.

The survey of freshman-application rates was conducted for *The Chronicle* by John Minter Associates, Box 107, Boulder, Colo. 80306, a research organization specializing in higher-education studies.



Note: All percentages are of the June, 1981, total.

CHRONICLE CHART BY PETER H. STAFFORD

Changes in Number of Freshman Applicants

January 31, 1982, compared with January 31, 1981

	Change in average (a)	Institutions reporting increase	Institutions reporting decrease	Change		
				Low (b)	Median (c)	High (d)
Private colleges and universities						
Research and Ph.D.-granting	+ 4.1%	50.0%	50.0%	− 5.8%	− 0.9%	+ 9.2%
Comprehensive	+ 1.2%	50.8%	47.5%	−10.2%	+ 0.7%	+ 9.6%
Liberal arts	− 3.1%	48.5%	51.5%	−14.6%	− 1.2%	+ 9.2%
Regions						
Northeast and Mid-Atlantic	+ 0.7%	52.3%	47.7%	−10.5%	+ 0.3%	+ 9.1%
Great Lakes and Plains	+ 9.3%	59.4%	40.6%	− 6.9%	+ 2.7%	+ 9.5%
Southeast	− 5.1%	38.2%	58.8%	−14.9%	− 2.4%	+ 9.1%
West and Southwest	− 2.6%	26.3%	73.7%	−11.1%	− 7.2%	− 0.2%
Enrollment						
500 − 999	− 4.2%	48.0%	52.0%	−15.0%	− 3.8%	+12.5%
1,000 − 2,499	− 0.5%	50.7%	49.3%	−10.4%	+ 0.3%	+ 8.2%
2,500 − 4,999	− 0.2%	46.4%	50.0%	− 9.4%	− 0.8%	+10.2%
5,000 − 9,999	+ 3.5%	57.9%	42.1%	− 6.3%	+ 0.4%	+ 3.2%
10,000 and over	+ 4.1%	44.4%	55.6%	− 7.4%	− 2.7%	+ 9.3%
All private institutions	**− 1.9%**	**49.0%**	**50.8%**	**−10.4%**	**− 0.2%**	**+ 9.3%**
Public colleges and universities						
Research and Ph.D.-granting	+ 5.6%	54.7%	45.3%	− 7.8%	+ 1.5%	+16.7%
Comprehensive	− 0.8%	58.8%	41.2%	−12.3%	+ 3.2%	+15.0%
Regions						
Northeast and Mid-Atlantic	+13.9%	73.7%	26.3%	− 3.3%	+ 8.5%	+20.6%
Great Lakes and Plains	+ 3.0%	58.1%	41.9%	− 4.1%	+ 2.9%	+16.5%
Southeast	− 5.8%	30.8%	69.2%	−18.9%	−10.2%	+ 7.1%
West and Southwest	+ 2.9%	75.0%	25.0%	− 4.5%	+ 8.5%	+24.9%
Enrollment						
500 − 2,499	− 2.3%	62.5%	37.5%	−19.2%	+ 7.5%	+19.3%
2,500 − 4,999	+ 1.6%	63.6%	36.4%	−13.2%	+ 6.3%	+32.0%
5,000 − 9,999	− 4.6%	54.5%	45.5%	−16.1%	+ 1.1%	+ 8.5%
10,000 − 19,999	− 0.2%	46.4%	53.6%	−12.1%	− 1.2%	+11.4%
20,000 and over	+ 7.9%	62.9%	37.1%	− 6.7%	+ 5.8%	+19.9%
All public institutions	**+ 0.8%**	**57.8%**	**42.2%**	**− 8.3%**	**+ 3.0%**	**+15.5%**
All institutions	**− 1.0%**	**52.1%**	**47.8%**	**− 9.8%**	**+ 0.7%**	**+11.3%**

(a) Percentage change in mean number of applications received by January 31, 1982, compared with the mean for a year earlier.
(b) The bottom one-fourth of the institutions reported changes smaller than the percentage shown.
(c) Half of the institutions reported changes greater than the percentage shown.
(d) The top one-fourth of the institutions reported changes greater than the percentage shown.
Note: Survey data are from a stratified random sample of 286 four-year colleges and universities, excluding those with enrollment under 500

SOURCE: SURVEY FOR THE CHRONICLE BY JOHN MINTER ASSOCIATES

Dental Educators Troubled by Student Indebtedness

By ROBERT L. JACOBSON

NEW ORLEANS

Mark B. Desrosiers, a second-year dental student at the University of Pennsylvania, says he owes so much money for his higher education that he has had to give up almost all hope of going into private practice or continuing his studies toward a dental specialty after he graduates.

By the time he has earned his degree, probably two years from now, he figures he'll have to pay back about $9,000 a year for the next 10 years. Already his cumulative debt, including loans he took out as an undergraduate at Clark University, has reached $47,000.

Even though dentists can expect relatively high earnings over their lifetimes, Mr. Desrosiers says he just doesn't see how—with all his outstanding loans—he will be able to afford the costs of starting his own practice or even of "buying into" someone else's practice as an associate.

Further education toward a specialty must also be ruled out for financial reasons, he says, and he'll probably try to get into either a general-practice residency or the Navy's dental corps.

Parents Unable to Help

"One reason I chose dentistry is that at one point I thought I could become financially independent," the 23-year-old student says. "But it's not working out that way."

He says he has always been considered a "needy" student, and now—especially with a brother in college—his parents simply aren't in a position to give him much financial help.

The size of his debt caused a brief stir here last week when he mentioned it at a hearing before a committee of the American Association of Dental Schools. Some members of the association, which was holding its annual meeting, seemed surprised that a second-year student could owe that much—although the issue of student indebtedness is causing growing concern among dental educators.

They fear not only that some students may be getting too deeply in debt, but also that the situation could accelerate a recent decline in the number of both dental-school applicants and first-year students.

Eric S. Solomon, director of resource studies for the association and head of its cooperative application service, said the ratio of applicants to first-year enrollees at the country's 60 dental schools next year was expected to be about 1.4 to 1. The ratio peaked at 2.5 to 1 in 1976.

Average Debt Is $22,100

Summarizing the results of an association survey, Mr. Solomon also reported that more than half of last year's dental-school graduates had accumulated personal debts of at least $20,000, including undergraduate loans, before completing their professional studies. The proportion was more than twice that reported for new graduates only three years earlier.

The survey results, covering about 3,500 of some 5,700 graduating seniors last spring, showed that the proportion owing $20,000 or more had increased from 25.8 per cent in 1978 to 56.1 per cent in 1981.

The average debt for all of the students last year was $22,100, ranging from $17,900 at public institutions to $29,300 at private institutions. Counting only those who had debts, however, the overall average was $24,700.

Several dental-school officials here said they thought that cumulative debts of as much as $50,000 might soon become fairly common. Tuition and living expenses at many dental schools amount to more than $20,000 a year.

With Congress considering proposals that could raise interest rates and other costs of student borrowing, many dental-school leaders also are increasingly worried that students may not adequately understand the long-term consequences of incurring large debts. Jack Pogony, a planning associate at Georgetown University's dental school, told a session on student aid here that many students were entering school in a state of "blissful ignorance" about such things, but were ending up in a state of "panic" by their final year.

Woman Athletes Win Bias Suit Against Washington State U.

PULLMAN, WASH.

Washington State University has discriminated against women in its athletic programs and must take steps to assure equal treatment in the future, a superior-court judge here has ruled.

Judge Philip Faris awarded unspecified damages to female coaches and athletes at the university. He ordered the university to allocate at least 32.5 per cent of its state athletic funds to women's sports.

The decision was hailed as a victory by representatives of 53 women who had charged the university with sex discrimination. Their lawsuit, based on an equal-rights provision added to the Washington State Constitution in 1972, may affect other states with equal-rights laws, according to Mary Ellen Hudgins, lawyer for the students and coaches.

The university's spending for men's sports amounts to about $3.2-million a year, while women's sports have budgets of about $1-million, according to university officials.

Judge Faris ordered that 32.5 per cent of the state-provided athletic budget go to women's sports, but he said the ruling did not apply to gate receipts at varsity football games or to private contributions.

As a result, university officials said, the decision will have little practical effect, since about half of the state-provided money now is being spent on women's athletics.

Judge Faris said the 32.5-per-cent figure represented the proportion of university athletes who are women.

Wallace Friel, Washington State's lawyer, said the university would not appeal the decision.

Judge Faris's ruling came after an eight-week trial, during which female coaches and athletes complained of unfair treatment in the distribution of scholarships, facilities, equipment, and budgets. University officials denied the charges.

The judge rejected most of the women's requests for damages, but he agreed that at the university "the message came across, loud and clear, that women's sports were of lower priority." He upheld a contention that female coaches had been victims of discrimination when only male coaches were given the use of "complimentary cars," and he awarded damages to female athletes who had been denied equipment, uniforms, laundry services, and travel accommodations comparable to those provided men in the same sports.

Although the judge did not specify an amount, lawyers for the women estimated that damages could total several hundred thousand dollars.

—BARRY MITZMAN

Washington Notes

▪ Pentagon Asks Industry to Support Campus Research

The Defense Department is encouraging industry to support more research at universities to "speed the transfer of technology from basic research into production of weapons systems," a top Pentagon official told Congress last week.

Richard D. DeLauer, Under Secretary of Defense for research and engineering, said he was recommending that companies that receive defense contracts provide greater financial support to university research. He told the Senate Defense Appropriations Subcommittee that this would "foster closer cooperation between academia and industry" and reduce the time before the results of basic research supported by the agency can be applied.

Mr. DeLauer also said the Pentagon had asked Congress for $880.2-million for university research in fiscal 1983, up from $780.8-million for such research in the current fiscal year.

▪ Defense Department Raises Its Support for ROTC

The Pentagon will award 26,500 scholarships to college students in Reserve Officers Training Corps programs in fiscal 1983, 5,000 more than this year.

The move continues a four-year Defense Department policy of steadily increasing the number of R.O.T.C. scholarships. About 20,000 were awarded in fiscal 1981.

An official said the department was asking Congress for $345.7-million for R.O.T.C. programs for fiscal 1983. She said Congress had authorized $304.4-million for the program this year.

▪ Scientists Say White House Overstates NIH Grants

Scientists have told the House Subcommittee on Health and Environment that the Reagan Administration's proposed $3.7-billion budget for the National Institutes of Health will not provide 4,100 new research grants, as the institutes have claimed.

A group of scientists and university leaders calling itself the Delegation for Basic Biomedical Research said the budget would pay for only some 3,000 grants. The group, which includes former N.I.H. director Donald S. Fredrickson, said an additional $216-million would be needed to finance the number of grants, some 4,700, that were supported this year.

It said $13.4-million more would be needed to bring the number of National Research Service Awards for young scientists to the 1982 level of 9,702. The Administration has proposed spending $151-million to support 8,915 awards in fiscal 1983.

▪ Loan-Management Panel Named in Education Department

As part of a governmentwide effort to put a tighter rein on the collection and administration of federal loans, Education Secretary Terrel H. Bell has established a panel to oversee the collection of debts owed by students and educational institutions.

Edward M. Elmendorf, Deputy Assistant Secretary of Education for student aid, and four other Education Department officials have been named to the Credit Management Oversight Board. It will advise Secretary Bell on ways to speed up the collection of more than $10-billion in outstanding loans to educational institutions and students.

▪ Job-Training Program Proposed as a Substitute for CETA

The Reagan Administration has proposed legislation to establish a job-training and public-service-employment program to take the place of the Comprehensive Employment and Training Act.

The existing program, scheduled to expire in September, has been criticized as too expensive and too complicated.

Sen. Dan Quayle, Republican of Indiana, and Sen. Orrin G. Hatch, Republican of Utah, introduced the bill at the Administration's request.

During hearings before House and Senate panels last week, Secretary of Labor Raymond Donovan said that under the Administration's plan, federal funds for job training would drop from the $3.7-billion allocated in fiscal 1982 to $2.4-billion in fiscal 1983.

The Administration proposes to save money by eliminating certain types of training and stipends for people enrolled in vocational programs. It also wants to restrict the program to 1.1 million unemployed people between the ages of 16 and 25.

"The Administration's bill is aimed at the skilled-worker level," said an aide to Senator Quayle.

▪ Hearings Begin on Bond Limits Affecting Student Loans

The Senate Finance Committee began hearings last week on proposals to tighten restrictions on tax-exempt revenue bonds. University representatives warn that the restrictions—part of President Reagan's proposed tax revisions—might affect student-loan programs financed by tax-exempt bonds.

Higher-education lobbyists argue that student-loan programs serve a public purpose and should not be lumped with industrial-development programs that are also financed with tax-exempt bonds.

The Treasury Department has said that tax-exempt bonds issued to finance student loans increased from $100-million in 1976 to $1-billion in 1981. At the same time, tax-exempt-bond issues of $1-million or less for industrial development increased from $1.4-billion to $10.5-billion.

Congressional Hearings

WASHINGTON

The following Congressional hearings of interest to educators and scientists are scheduled for coming weeks. Since times, places, and witnesses frequently change with little advance notice, it is advisable to check with committees by telephone on or near the appointed dates.

SENATE

Veterans Administration appropriations. March 23. Hearings on the proposed fiscal 1983 budget for the Veterans Administration. Contact: Senate Appropriations Subcommittee on Housing and Urban Development and Independent Agencies; (202) 224-7274.

EEOC nomination. March 24. Hearing on the nomination of Tony E. Gallegos, manager of equal-opportunity programs for Douglas Aircraft Company, to the Equal Employment Opportunity Commission. Contact: Senate Committee on Labor and Human Resources; (202) 224-7664.

National Science Foundation. March 25. Hearings on the fiscal 1983 authorization for the National Science Foundation. Contact: Senate Subcommittee on Science, Technology, and Space; (202) 224-9351.

National Science Foundation. April 15. Hearings on the fiscal 1983 authorization for the National Science Foundation. Contact: Senate Committee on Labor and Human Resources; (202) 224-7664.

Education appropriations. April 15. Hearings on the proposed fiscal 1983 budget for the Department of Education. Contact: Senate Appropriations Subcommittee on Labor, Health and Human Services, and Education; (202) 224-7283.

Indian community colleges. April 15. Hearings on the tribally controlled community-college program. Contact: Senate Select Committee on Indian Affairs; (202) 224-2466.

Arts appropriations. April 27. Hearings on the proposed fiscal 1983 budget for the National Endowment for the Arts. Contact: Senate Appropriations Subcommittee on the Interior; (202) 224-7262.

National Science Foundation appropriations. April 27. Hearings on the proposed fiscal 1983 budget for the National Science Foundation. Contact: Senate Appropriations Subcommittee on Housing and Urban Development and Independent Agencies; (202) 224-7274.

Department of Education. April 27-29. Oversight hearings on the Department of Education. Contact: Senate Appropriations Subcommittee on Labor, Health and Human Services, and Education; (202) 224-7283.

Education appropriations. May 3-7. Hearings on the proposed budget for the Department of Education in fiscal 1983. Contact: Senate Appropriations Subcommittee on Labor, Health and Human Services, and Education; (202) 224-7283.

Humanities appropriations. May 11. Hearings on the proposed fiscal 1983 budget for the National Endowment for the Humanities. Contact: Senate Appropriations Subcommittee on the Interior and Related Agencies; (202)224-7262.

HOUSE OF REPRESENTATIVES

Education appropriations. March 16. Hearings on the Department of Education's request for rescissions and supplemental appropriations for fiscal 1982 and its budget request for fiscal 1983. Contact: House Appropriations Subcommittee on Labor, Health, Human Services, and Education; (202) 225-3508.

Student-aid appropriations. March 15. Hearings on the proposed fiscal 1983 budget for student financial aid and student-loan insurance. Contact: House Appropriations Subcommittee on Labor, Health, Human Services, and Education; (202) 255-3508.

Education appropriations. March 16. Hearings on the proposed fiscal 1983 budget for education statistics and training, libraries, and bilingual education. Contact: House Appropriations Subcommittee on Labor, Health, Human Services, and Education; (202) 225-3508.

National Science Foundation appropriations. April 21 and 22. Hearings on the proposed fiscal 1983 budget for the National Science Foundation. Contact: House Appropriations Subcommittee on Housing, Urban Development and Independent Agencies; (202) 225-3241.

Humanities appropriations. April 29. Hearings on the proposed fiscal 1983 budget for the National Endowment for the Humanities. Contact: House Appropriations Subcommittee on the Interior; (202) 225-3081.

Arts appropriations. May 19. Hearings on the proposed fiscal 1983 budget for the National Endowment for the Arts. Contact: House Appropriations Subcommittee on the Interior; (202) 225-3081.

2-Year Drop Seen in Campus Research Aid

WASHINGTON

Federal support of university research will decline by 9.6 per cent in constant dollars from fiscal 1981 to 1983 if Congress accepts President Reagan's recent budget request, according to a report released last week by the American Association for the Advancement of Science.

That decline would be greater than the 1.3-per-cent drop in basic-research funds predicted for the same period. The report was based on figures compiled by the federal Office of Management and Budget.

An official of the association said the difference stemmed from the fact that some agencies were cutting funds for university projects to protect their own "in house" research.

The report was prepared by the science association, the Association of American Universities, and 14 other higher-education and professional organizations.

It says that universities will receive 15 per cent of their federal research support from the Defense Department in fiscal 1983 under the Reagan budget compared with 11 per cent in fiscal 1980.

Although the Departments of Commerce and Energy and the National Aeronautics and Space Administration "show significant real increases in [funds for] basic research" for fiscal 1983, the report says, support to universities from those agencies will actually decline from fiscal 1981 to fiscal 1983, when inflation is taken into account.

—KIM McDONALD

(Budget authority in millions)

	Fiscal 1981	Fiscal 1982 (estimated)	Fiscal 1983 (estimated)	Change from 1981 to 1982 Current dollars	Change from 1981 to 1982 Constant dollars
Health and Human Services Department	$2,223	$2,241	$2,293	+ 3.1%	− 11.4%
National Science Foundation	813	817	885	+ 8.9%	− 6.5%
Defense Department	554	632	736	+ 32.9%	+ 14.2%
Agriculture Department	248	265	270	+ 8.9%	− 6.5%
Energy Department	302	271	272	− 9.9%	22.6%
National Aeronautics and Space Administration	184	191	191	+ 3.6%	− 10.8%
Agency for International Development	78	82	90	+ 15.4%	− 0.9%
Environmental Protection Agency	53	44	25	− 52.8%	− 59.5%
Education Department	42	33	36	− 14.3%	26.4%
Interior Department	40	33	24	− 40.0%	− 48.4%
Transportation Department	18	17	19	+ 5.6%	− 9.3%
Commerce Department	44	34	14	− 68.2%	− 72.7%
Labor Department	9	3	0	−100.0%	−100.0%
Other	20	16	13	− 35.0%	− 44.1%
Total—current dollars	**$4,628**	**$4,679**	**$4,868**	**+ 5.2%**	**—**
—constant fiscal 1972 dollars	**2,203**	**2,045**	**1,991**	**—**	**− 9.6%**

SOURCE: AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

Bills in Congress

WASHINGTON

Following is a summary of bills of interest to higher education that have been introduced in Congress. Copies of bills may be obtained from Senators (Washington 20510) or Representatives (Washington 20515).

SENATE

S 2187—Military academies. To authorize Senators to appoint students to fill the places of cadets at the Military Academy or Air Force Academy or midshipmen at the Naval Academy who drop out or who do not graduate. By Senator Humphrey (R-N.H.).

HOUSE OF REPRESENTATIVES

H Res 384—Pell Grants. To express House support for sufficient funds to provide Pell Grants for 2,600,000 students in the 1982-83 academic year. By Representative Dunn (R-Mich.).

H Res 392—Student Aid. To express the sense of the House that the President should take all possible actions to insure adequate funding for the campus-based student financial-aid programs. By Representative Emery (R-Me.).

H Con Res 291—Fiscal 1983 Budget. To express the sense of Congress that the President should submit a revised fiscal 1983 budget. By Representative Wirth (D-Colo.) and four others.

HR 5792—Financial assistance. To authorize grants to offset reductions in other forms of student aid. By Representative Gilman (R-N.Y.).

HR 5796—Tuition tax credits. To amend the Internal Revenue Code to provide income-tax credits for tuition. By Representative Minish (D-N.J.).

HR 5804—Student loans. To provide an additional $1.3-billion for Guaranteed Student Loans in fiscal 1983. By Representatives Whitten (D-Miss.) and Conte (R-Mass.).

HR 5820—Vocational education. To amend the Vocational Education Act of 1963 to provide incentive grants to states to establish programs to train technicians in electronics and computer science. By Representative Miller (D-Cal.) and 18 others.

HR 5842—Science Foundation. To authorize appropriations for the National Science Foundation for fiscal year 1982 and 1983. By Representative Fuqua (D-Fla.)

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SULMONA INSTITUTE

Dispatch Case

English professors at Cambridge University, who recently have been bickering over the teaching of "structuralism" and other modern approaches to the study of literature, face a new controversy over the choice of a scholar for the prestigious King Edward VII Professorship in English.

Frank Kermode, a well-known critic and scholar, resigned the chair last year to protest the treatment of Colin MacCabe, a young lecturer allegedly denied tenure because of his Marxist views.

The two leading candidates to replace Mr. Kermode come from opposite camps in the tenure dispute, which has divided the English faculty. One is Christopher Ricks, an outspoken critic of modernist approaches and an opponent of Mr. MacCabe. The other is Raymond Williams, a Marxist who defended Mr. MacCabe during the rancorous debates over his future.

Candidates from outside Cambridge, who might generate less controversy, include Donald Davie, a professor of English at Vanderbilt University, and Denis Donoghue, a professor of English at New York University.

The Edward VII chair is classified as "regius," which means that Queen Elizabeth has the authority to make the appointment. In practice, the selection is generally made by the Prime Minister, who acts on the advice of civil servants.

The civil servants consult with outstanding scholars in the field, but in this case most observers believe they will have a difficult time identifying a candidate acceptable to all sides.

•

A government commission in Australia has been holding hearings on academic tenure in cities throughout the country for the past month. While most of the testimony has called for the retention of tenure, faculty members are worried that the government may be seeking ways to make it more flexible during a period of budget reductions.

At present, most faculty members with the rank of lecturer and above are tenured. However, universities have begun to expand the number of faculty members employed on short-term contracts for three to five years.

•

Temple University plans to establish a campus in downtown Tokyo and begin a program that, a university spokesman says, would make it the first American institution to offer academic degrees in Japan.

The campus was proposed by a group of Japanese educators and businessmen who established the Temple University Japan Program. The program is headed by Yoshito Shinoto, former president of the International Christian University in Japan.

Marvin Wachman, Temple's president, said that plans called for the establishment in May of an intensive English-language course for about 500 students. By May, 1983, he said, the institution will be offering liberal-arts courses leading to associate and bachelor's degrees, and by May, 1984, it hopes to offer a master's program in the teaching of English as a foreign language.

William F. Sharp, a professor of history at Temple who will direct the academic program in Tokyo, said the university would offer bachelor's degrees in English, sociology, physical sciences, international studies, and American studies.

International

Israeli Students Signal Resistance to Withdrawal from Sinai

By **HERBERT M. WATZMAN**

YAMIT, SINAI

When 75 Israeli students occupied two houses in this desert town last month, they provided dramatic evidence that the impending Israeli withdrawal from the Sinai Peninsula is an issue of profound concern to the country's students and professors.

The students in Yamit are part of the Movement to Stop the Withdrawal from Sinai, a nationwide organization that has been encouraging Israelis to move to the region. Their goal is to prevent the evacuation of settlements and the transfer of the territory to Egypt on April 20, as provided under the Camp David agreements.

The leader of the students is Tzahi Hanegbi, a former chairman of the student union at the Hebrew University of Jerusalem and of the National Union of Students.

Mr. Hanegbi claims that as many as 1,000 students will move into the area in the next several weeks. They have come to Yamit to stay, he says.

Although few students who were interviewed at the Hebrew University of Jerusalem this month expressed support for the aims or methods of the squatters in Yamit, they all said they were concerned that Egypt would not keep its commitments under the peace treaty after the withdrawal.

HERBERT M. WATZMAN

Jews must not be forced to leave Sinai, says Yehuda Schwartz, a Bar-Ilan University student.

They also said they feared that withdrawal from Sinai would lead to increased pressure on Israel to withdraw from the occupied West Bank of the Jordan River and from the Golan Heights.

Such issues directly affect Israeli students, a majority of whom begin their studies after completing army service. Most male students must spend 45 days a year on active duty in the reserves.

Students also form the core of many of the combat units that would take the brunt of the fighting if war should break out.

In addition, many of them may have to deal directly with the removal of the Sinai squatters while serving in the reserves.

Most of the settlers in Sinai, including those who have just arrived and those who have lived there for years, have vowed that they will not leave voluntarily.

Army units have already started moving settlers across what will soon be the international border with Egypt.

The students who have settled in Yamit believe that Sinai is part of the biblical land of Israel and cannot be surrendered to a foreign country. According to Yehuda Schwartz, a sociology student at Bar-Ilan University and a recent immigrant from France, Jews must be allowed to settle anywhere within those biblical borders.

"The withdrawal is only part of the larger problem facing Zionism today," he said in an interview. "People wanted the Jewish state to be a country like all other countries, but it cannot be."

Mr. Schwartz said Jews must not be forced to leave, and he maintained that they and the Arabs could live peacefully together in Sinai.

At the Hebrew University, such opinions seemed to have little support.

"I don't support the people who are settling in Yamit now," said Maureen Swartz, a student from the University of British Columbia who is spending her junior year in Jerusalem.

"I can see their point, but we've signed

Continued on Following Page

Number of Chinese on American Campuses Is Beginning to Decline, Study Shows

By **MALCOLM G. SCULLY**

WASHINGTON

The rapid growth in the number of Chinese students and scholars studying in the United States probably has come to an end, according to a report from the U.S.-China Education Clearinghouse here.

By mid-1981, as many as 6,000 students and scholars from China were studying at American colleges and universities, the clearinghouse report estimates. However, it notes that Chinese officials have said that the "pool" of students and scholars who "need" to study in the U.S. has begun to shrink, and that they want to limit the number of new students and scholars to about 500 a year.

"The 'backlog' of young scholars created by the Cultural Revolution produced a large group 'needing to go' as soon as exchanges became possible," the clearinghouse says in its report. "For a variety of reasons—including assignment to jobs, imposition of more stringent age limits, and the fact that many of the 'best' candidates from this group have already been sent abroad—this pool is being depleted rapidly."

Eventually, the report adds, graduates from China's newly rigorous universities "will constitute a new, high-quality pool of potential applicants" to graduate programs at American institutions.

But, it concludes, "the total number will be smaller and constant from year to year."

In preparing its report on the status of Chinese students, the clearinghouse sent questionnaires last August to 313 colleges and universities that were thought to have admitted Chinese students and scholars.

3,467 in 3 Years

The 180 institutions that responded said that over a three-year period beginning in 1978-79, 3,467 Chinese students and scholars had come to the United States.

The total included 399 undergraduates, 656 graduate students, and 1,945 "visiting scholars"—professors and scientists from China who came to the U.S. for what amounted to postdoctoral study.

The remaining 467 were classified as "other"—usually students studying English as a second language, the report says.

The clearinghouse based its estimate of 6,000 Chinese scholars and students at American institutions in 1981 on State Department statistics on the number of visas issued by the U.S. embassy in Peking and by American consulates in Shanghai and Guangzhou.

The report notes that the 3,467 students found by the survey account "for only 58 per cent of the 6,000 total reported by the Department of State" even though "most schools known to have large numbers of Chinese nationals responded to the questionnaire."

It suggests several possible explanations:

- The State Department estimate may be too high "because many who received visas did not come to the United States," or because more Chinese students and scholars "have returned to China than the department supposes."
- "The remaining 2,500 students and scholars are distributed among far more institutions than were included in the list compiled by the clearinghouse."

The report also says that since formal educational exchanges began in 1978, there have been 10 times as many Chinese studying in America as Americans studying in China.

While "some will be struck by the tremendous imbalance in the flow of students and scholars between China and the United States," the report says, "it should be noted that similar disparities exist between the United States and all developing countries."

The report adds that "strict numerical equivalence is not and should not be a factor shaping exchanges."

American institutions, it adds, "are accustomed to receiving foreign students and

Continued on Following Page

Chinese Students and Scholars at U.S. Colleges

Fields of study	Visiting scholars			Graduate students			Undergraduates		
	1979-80	1980-81	1981-82	1979-80	1980-81	1981-82	1979-80	1980-81	1981-82
Mathematics and physical sciences	162	472	108	88	155	244	24	80	84
Medical and life sciences	72	160	44	10	27	60	3	21	24
Engineering	171	324	187	43	173	154	5	50	42
Social sciences	13	25	14	8	34	35	13	48	37
Humanities	5	33	12	1	50	90	11	61	44
English as a second language	8	33	20	24	54	18	37	163	96
Total	431	1,047	385	174	493	601	93	423	327

SOURCE: U.S.-CHINA EDUCATION CLEARINGHOUSE

Chinese in U.S.

Continued from Preceding Page

scholars; schools in China are neither accustomed nor (from their perspective) equipped to do so."

Generally, the responding institutions said that both the students and visiting scholars required "at least some additional language training after arrival on campus." They had few problems with reading English, but needed work on both "aural comprehension" and "oral expression."

Financial Support

The survey also showed that 65 per cent of the visiting scholars and 29 per cent of the students received full support from the Chinese government. By contrast, 17 per cent of the scholars and 14 per cent of the students were fully supported by an American college or university.

The remaining scholars and students received support from a variety of sources, and about one-third of the students were supported by "friends or relatives outside China."

The study also found that:

▶ A large majority of the Chinese students in the U.S. came to study mathematics, physical science, or engineering.

▶ Virtually all of the visiting Chinese performed as well as or better than their fellow students from the United States and other countries.

According to the report, 25 U.S. institutions have enrolled more than 40 Chinese students and scholars in the three-year period covered by the survey.

In alphabetical order, they are:

University of California at Berkeley
University of California at Davis
University of California at Los Angeles
University of California at Santa Barbara
Columbia University
Cornell University
East-West Center in Honolulu
University of Florida
Harvard University
International School of Languages
La Guardia Community College
University of Lowell
University of Maryland at College Park
Massachusetts Institute of Technology
University of Massachusetts at Amherst
University of Minnesota
Northwestern University
Pennsylvania State University
University of Pittsburgh
Princeton University
Purdue University
Stanford University
University of Southern California
Wayne State University
University of Wisconsin at Madison

Until January 1, the clearinghouse was operated as a joint project of the Committee on Scholarly Communication with the People's Republic of China and the National Association for Foreign Student Affairs. Since then, most of its functions have been assumed by the latter group.

The report was written by Thomas Fingar, a research associate in the provost's office at Stanford University, and Linda A. Reed, a N.A.F.S.A. project director and former program administrator at the clearinghouse.

Copies of the report, *Survey Summary: Students and Scholars from the People's Republic of China in the United States, August 1981*, are available for $1 each from the National Association for Foreign Student Affairs, 1860 19th Street, N.W., Washington 20009.

Sinai

Continued from Preceding Page

the peace treaty and, if we fool around with it, it will bring us more trouble than we can handle. I'm skeptical that the peace will last, but it is important and we have to try."

However, Ms. Swartz said she would oppose any Israeli withdrawal from the West Bank or the Golan Heights. "The West Bank and the Golan stay with us," she said. "That I will fight for 100 per cent."

Another student, Dvor Lerner, who is majoring in Middle-East studies at the Hebrew University, added that the Yamit settlers, who recently threatened to commit acts of "self-sacrifice" and called on soldiers to disobey orders to remove them, had gone too far.

"We have to give the Arabs a chance to prove themselves," he said.

The students in Yamit, who have occupied two houses whose owners left the area voluntarily, say they represent a large and growing segment of students at Israeli universities.

If the government keeps to its timetable for withdrawal, the squatters soon could be facing soldiers, some of whom may be friends or fellow students.

No one, other than the settlers themselves, has doubts that the evacuation will be carried out, but the students in Yamit are not making any plans to return to their universities.

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News Summary

Articles on inside pages

Shimer College has been on the brink of insolvency for years, but loyal students and faculty members hope to keep it from going under. Story on Page 5.

The first fossil remains of a land mammal in Antarctica have been found by a team of U.S. scientists. Story on Page 3.

Yale University has turned down a government grant after a professor of mathematics there refused to comply with federal rules on accounting for his time. Story on Page 4.

A women's university in Mississippi has defended its single-sex admissions policy before the Supreme Court. Story on Page 9.

Science education would get $30-million more than President Reagan asked under a measure approved by a House committee. Story on Page 9.

Scholars and journalists who reveal the names of covert intelligence agents would face imprisonment and fines under a bill passed by the Senate. Story on Page 12.

Tenants of One Dupont Circle, owned by the American Council on Education, face rent increases of 30 per cent. Story on Page 8.

The financial crunch has arrived at one of the most successful scholarly publishers in the U.S.—the University of Chicago Press. Story on Page 17.

Israeli authorities want to close Bir Zeit University permanently, officials of the West Bank institution have charged. Story on Page 15.

Despite budget increases, British Columbia's three universities have been forced to cut personnel and programs. Story on Page 15.

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Colleges Move to Offset Loss of Student Aid; House Panel Refuses to Cut Loans Further

House Panel

WASHINGTON

Turning its back on President Reagan's proposals to make drastic cuts in Guaranteed Student Loans, the House Appropriations Committee last week voted to provide an additional $1.3-billion for the program this year—$322-million more than the President wants.

The committee also put the Education Department on notice that it opposes a plan being considered by the agency that would make it harder for students living with their parents to qualify for Pell Grants.

In a later vote, the House of Representatives approved a stopgap measure that would keep money flowing to the Department of Education and other federal agencies for the rest of the current fiscal year.

In approving the extra money for student loans in fiscal 1982, which began October 1, the appropriations panel rejected the President's proposals to cut loan costs by boosting the interest rates and fees paid by borrowers, and by barring graduate students from the loan program. The money is part of a supplemental appropriations bill for several federal activities.

The additional money is needed for the loans—many of which will be used by students in the 1982-83 academic year—because Congress has so far appropriated only $1.773-billion for them. That is about $1.3-billion short of the $3.073-billion the program is expected to cost this year.

The new loan restrictions proposed by the Administration would keep costs down to $2.75-billion, so the President asked Congress to provide only $978-million in additional funds.

In voting for the full $1.3-billion, the committee said in its report on the bill:

"At this time, it seems unlikely that

Continued on Page 14, Column 1

Double-digit increases in tuition for next fall are common, even though the rate of inflation has slowed. Story on Page 7.

Offsetting U.S. Cutbacks

By JANET HOOK

Bracing for the loss of millions of dollars in federal aid next fall, colleges and universities are looking for ways to help their students make ends meet when the time comes to pay tuition bills.

Some are allocating a greater share of their own resources to cushion the blow of cutbacks in federal grants, loans, and job subsidies in academic 1982-83.

Many are launching aggressive fund-raising drives, raising tuition, and economizing in other areas of campus spending.

"We're putting our entire budget under a microscope, pulling every loose penny out," says Stephen J. Trachtenberg, president of the University of Hartford. "We've made student aid the single highest priority in our budget this year."

The prospect of reduced federal assistance has spurred efforts to establish new loan and work-study programs in states and at individual institutions. Many col-

Continued on Page 14, Column 1

AAUP Challenges Claim that Faculty Layoffs Need Not Be Based Mainly on 'Exigency'

By ROBERT L. JACOBSON

WASHINGTON

Officials of the American Association of University Professors have disputed a lawyer's contention that colleges and universities need not rely mainly on "financial exigency" to lay off tenured faculty members.

Reacting to statements by the lawyer, David J. Figuli, that were reported in *The Chronicle* (March 17), leaders of the faculty group also criticized the American Council on Education for sponsoring his appearance at national "leadership seminars" for academic administrators.

"The guy's wrong," said Matthew W. Finkin, chairman of the association's Committee A on Academic Freedom and Tenure. He and other A.A.U.P. leaders especially challenged Mr. Figuli's view that a decision last June by the U.S. Court of Appeals for the First Circuit was a "breakthrough" in judicial thinking on faculty dismissals.

The A.A.U.P. officials seemed concerned that Mr. Figuli's analysis might encourage colleges to take a more aggressive approach to layoffs.

The decision by the Court of Appeals upheld the ouster of two tenured professors of physical education at Humacao University College of the University of Puerto Rico after their program was discontinued. Attracting little attention at first, it has become the focus of a debate over faculty rights at a time of severe pressures to reduce university expenditures.

Mr. Figuli, who is now a labor-relations lawyer in Ohio, is former chief legal counsel for the Montana University System and former general counsel for the South Dakota board of regents.

He cited the Puerto Rico decision to support his belief that most college officials probably have much broader latitude than they realize to override contractual limitations on the dismissal of tenured professors.

Rather than having to demonstrate the existence of a "bona fide" financial emer-

Continued on Page 6, Column 1

Equal Pension Benefits Ordered for Men and Women

By CHERYL M. FIELDS

NEW YORK

A federal district judge here has reaffirmed a decision that the College Retirement Equities Fund must pay equal benefits to men and women.

The Teachers Insurance and Annuity Association-College Retirement Equities Fund is the country's major provider of pension plans to colleges and universities.

Judge Robert J. Ward of the U.S. District Court for the Southern District of New York reaffirmed his 1979 ruling in a case filed against the pension company and Long Island University by a faculty member, Diana L. Spirt.

He refused, however, to merge the case with another lawsuit challenging a decision by the New York State insurance commissioner to reject a "unisex" pension plan proposed by T.I.A.A.-C.R.E.F.

The U.S. Court of Appeals for the Second Circuit had asked Judge Ward to review his 1979 decision.

C.R.E.F. had appealed Judge Ward's ruling to the circuit court, arguing that it had acted "in good faith" in its belief that it legally could use separate mortality tables in calculating annuity benefits for male and female retirees.

Women have been paid lower monthly benefits than men under its retirement plans because the mortality tables showed that the average woman lived longer than the average man and thus would collect payments over a longer period.

Judge Ward upheld his original ruling that such payments violated Title VII of the Civil Rights Act of 1964, which bars sex bias in the treatment of employees.

The court held in 1979, he said, and "re-

Continued on Page 8, Column 1

Direct Agencies to Equip Labs, Congress Urged

WASHINGTON

Old and deteriorating research equipment has not been replaced at universities across the country partly because scientists haven't devoted enough of their federal research funds to upgrading it.

That's the conclusion of Donald N. Langenberg, deputy director of the National Science Foundation. He said Congress could help reduce the problem by directing federal agencies to spend $200-million annually to equip university laboratories.

Another $200-million a year could come from industry, he added.

Mr. Langenberg told a panel of the House Science and Technology Committee that as increases in federal research support slowed during the past decade, university researchers had put off investments in research equipment and spent the money to support graduate students and research assistants.

Researchers believed then, he said, that "the best strategy was to maintain people" and put off replacements of aging equipment "until things got better."

Could Cost $4-Billion

Now scientists have begun to realize the extent of the problem and have bought more equipment, Mr. Langenberg said. But he estimated that updating research equipment at universities across the country would cost between $1-billion and $4-billion.

A survey conducted last year by the Association of American Universities concluded that the research equipment at universities was, on the average, twice as old as that used by industry.

A more recent study by the association found that universities had spent a combined total of $400-million for research laboratories and equipment during the past four years. It estimated that twice that much should be spent in the next three years.

The National Science Foundation plans to increase its support of research-equipment purchases by 11.5 per cent over the current fiscal year, to $93.5-million in fiscal 1983, according to Mr. Langenberg.

He said the Defense Department was proposing to spend $30-million for university research equipment in fiscal 1983. Other agencies, such as the National Institutes of Health and the Department of Energy, also were planning to increase such expenditures, he said.

2 Studies Under Way

In response to questions from committee members, Mr. Langenberg acknowledged that the N.S.F. and the N.I.H. had no procedures for assuring that the money they allocate in their research budgets for equipment is actually spent for it by researchers.

He said a federal interagency task force was monitoring the problem of obsolete equipment. Another group at the National Academy of Sciences, chaired by William A. Fowler, a physics professor at the California Institute of Technology, began its study of the issue this month.

Mr. Fowler said his group would examine, among other matters, the question of whether researchers are spending too much on operating costs and salaries, at the expense of research equipment. It will also try to determine how much equipment industry can be expected to donate to universities under new federal tax provisions designed to stimulate such gifts.

He said poor laboratory equipment is prompting researchers to leave universities for industry positions and turning many graduate students away from experimental research.

—KIM McDONALD

FACT-FILE

U.S. Funds for Colleges and Universities

The top 100 institutions in total federal obligations for fiscal 1980

Institution	Research and development (a)		Total federal obligations (a)	
	Amount	Rank	Amount	Rank
Johns Hopkins U. (b)	$ 239,869,000	1	$ 260,977,000	1
Howard U. (c)	7,144,000	124	166,146,000	2
Mass. Inst. of Technology	141,011,000	2	163,206,000	3
U. of Washington	100,567,000	4	131,261,000	4
Stanford U.	104,539,000	3	122,223,000	5
U. of Cal., Los Angeles	87,073,000	6	118,908,000	6
U. of Minnesota	74,739,000	11	115,750,000	7
U. of Wisconsin, Madison	80,460,000	9	109,988,000	8
Harvard U.	83,997,000	7	109,038,000	9
U. of Cal., San Diego	90,703,000	5	103,043,000	10
U. of Michigan	71,204,000	12	100,164,000	11
Columbia U., Main Div.	81,361,000	8	99,213,000	12
Cornell U.	74,761,000	10	97,944,000	13
U. of Pennsylvania	70,843,000	13	89,176,000	14
Yale U.	67,970,000	14	87,060,000	15
Pennsylvania St. U. (d)	48,279,000	20	85,774,000	16
U. of Cal., San Francisco	62,581,000	15	80,023,000	17
U. of Cal., Berkeley	49,943,000	19	70,343,000	18
U. of Illinois, Urbana	50,332,000	18	68,562,000	19
U. of Colorado	44,460,000	22	66,134,000	20
Ohio State U.	37,034,000	30	64,952,000	21
Washington U.	52,512,000	16	63,340,000	22
U. of Chicago	50,592,000	17	62,706,000	23
U. of Southern Cal.	48,196,000	21	62,208,000	24
U. of North Carolina, Chapel Hill	41,850,000	25	61,373,000	25
New York U.	39,494,000	29	60,491,000	26
Michigan State U.	28,777,000	41	59,168,000	27
U. of Pittsburgh	33,181,000	35	57,260,000	28
Gallaudet College (d)	148,000	371	57,135,000	29
Duke U.	42,531,000	23	54,047,000	30
Purdue U.	36,487,000	31	53,083,000	31
U. of Rochester	40,992,000	26	52,182,000	32
U. of Cal., Davis	42,111,000	24	50,109,000	33
U. of Texas, Austin	40,223,000	28	49,502,000	34
Yeshiva U.	40,252,000	27	48,423,000	35
Indiana U.	26,334,000	47	48,333,000	36
U. of Arizona	33,283,000	34	48,059,000	37
U. of Iowa	34,598,000	32	47,232,000	38
U. of Miami	27,986,000	42	46,381,000	39
U. of Utah	31,826,000	36	42,874,000	40
U. of Florida	25,134,000	49	42,642,000	41
Northwestern U.	31,722,000	38	41,638,000	42
Case Western Reserve U.	31,399,000	39	40,620,000	43
Texas A&M U.	26,924,000	44	40,023,000	44
U. of Ala., Birmingham	26,835,000	45	39,528,000	45
Boston U.	24,909,000	50	38,544,000	46
California Inst. of Tech	34,493,000	33	38,358,000	47
Oregon State U.	29,577,000	40	37,829,000	48
U. of Cincinnati	19,422,000	64	37,230,000	49
U. of Maryland, College Park	26,367,000	46	36,482,000	50
U. of Tennessee, Knoxville	$ 20,572,000	61	$ 36,265,000	51
U. of Kentucky	13,933,000	84	35,481,000	52
Baylor C. of Medicine	31,784,000	37	35,071,000	53
Inter Amer. U. of Puerto Rico, San German	0	—	33,824,000	54
U. of Mass., Amherst	14,146,000	83	33,757,000	55
U. of Missouri, Columbia	16,380,000	75	33,157,000	56
Vanderbilt U.	25,928,000	48	33,099,000	57
Louisiana State U.	19,100,000	65	32,621,000	58
U.of Kansas	21,718,000	59	32,598,000	59
U. of Virginia	23,284,000	54	32,367,000	60
U. of New Mexico	17,862,000	71	32,158,000	61
Rutgers U.	16,130,000	76	32,115,000	62
U. of Hawaii, Manoa	23,677,000	52	31,935,000	63
U. of Connecticut	18,911,000	66	31,909,000	64
Temple U.	15,217,000	82	31,891,000	65
Colorado State U.	21,926,000	56	31,646,000	66
Georgia Inst. of Technology	27,833,000	43	31,229,000	67
N.C. St. U., Raleigh	16,059,000	77	29,280,000	68
U. of Texas Health Science Center, Dallas	22,172,000	55	28,665,000	69
Va. Poly. Inst. & St. U.	16,711,000	74	27 037,000	70
Princeton U.	21,423,000	60	26,795,000	71
U. of Georgia	16,885,000	73	26,712,000	72
Carnegie-Mellon U.	21,861,000	57	26,701,000	73
U. of Ill. Med. Ctr., Chicago	12,017,000	90	26,116,000	74
CUNY, Mount Sinai School of Medicine	21,799,000	58	25,880,000	75
Albany St. College	24,024,000	51	25,534,000	76
U. of Md. Baltimore Professional Schools	17,171,000	72	24,811,000	77
U. of Cal., Irvine	18,426,000	67	24,664,000	78
Virginia Commonwealth U.	15,575,000	79	24,616,000	79
Woods Hole Oceanographic Institute	23,415,000	53	24,171,000	80
Georgetown U.	13,489,000	86	23,773,000	81
SUNY, Buffalo	18,265,000	68	22,788,000	82
SUNY, Stony Brook	18,240,000	69	22,695,000	83
Washington State U.	13,162,000	87	22,570,000	84
Emory U.	16,028,000	78	22,351,000	85
Wayne State U.	11,900,000	92	22,281,000	86
Iowa St. U. of Sci. & Tech.	9,913,000	98	21,963,000	87
George Washington U.	13,606,000	85	21,740,000	88
U. of Alaska, Fairbanks	17,908,000	70	21,687,000	89
Rockefeller U.	19,511,000	63	21,484,000	90
U. of Texas Cancer Center	20,345,000	62	21,393,000	91
Brown U.	15,334,000	80	21,102,000	92
U. of Vt. & St. Agric. C.	12,035,000	89	20,518,000	93
Syracuse U.	10,263,000	97	19,252,000	94
U. of Rhode Island	12,907,000	88	19,092,000	95
Auburn U.	6,315,000	131	18,793,000	96
New Mexico State U.	10,484,000	96	18,679,000	97
U. of Oregon	9,311,000	102	18,296,000	98
Tufts U.	9,812,000	100	18,227,000	99
Oklahoma State U.	8,469,000	113	18,211,000	100
U.S. total	**$3,319,815,000**		**$4,155,366,000**	

(a) Amounts shown represent total obligations from 14 federal agencies which accounted for over 95 per cent of all federal obligations to universities and colleges in the United States and for 99 per cent of all federal obligations to such institutions for research and development. These proportions may not apply to all individual institutions, some of which receive significant amounts of their financing from agencies not included in the survey, such as the Department of Justice, the Veterans Administration, and the Smithsonian Institution. Amounts shown represent awards to individual institutions. Awards to the administrative offices of university systems are excluded from institutional totals because final allocation of funds is unknown, but are included in "U.S. total."

(b) Data for Johns Hopkins U. include $162-million obligated to the Applied Physics Laboratory, considered a federally financed research-and-development center until fiscal 1978.

(c) Howard U. and Gallaudet C. receive substantial appropriations from Congress each year for general operating expenses; their relative rankings thus reflect the magnitude of their non-science programs.

(d) Data for Pennsylvania State University include $12-million obligated to the Applied Research Laboratory, which was considered a federally funded research and development center until fiscal 1978.

SOURCE: NATIONAL SCIENCE FOUNDATION

Rules for Loans *Continued from Preceding Page*

publican who chairs the panel's Subcommittee on Government Processes, was particularly critical of medical schools that had poor records of collecting repayments from their highly paid graduates.

Some representatives of health schools said the new proposals would be too stringent. A spokesman for the Association of American Medical Colleges said many medical schools would find the proposed standards difficult to meet. He said the association had suggested alternatives, one of which would allow schools to demonstrate that they were exercising "due diligence" in collecting loans and to reduce their delinquency rates gradually without being penalized.

He said colleges could improve their collection rates if the law authorizing the loans were changed to permit institutions to write off obviously bad debts, pursue delinquent borrowers more vigorously, and limit the ability of such borrowers to receive other forms of federal assistance.

Said Martha Liggett, a spokesman for the American Association of Dental Schools, "I don't think most of our schools have problems with a 90-day delinquency standard, but a 30-day standard would cause real problems."

Allowing for the normal lag between the date a bill is sent and the date it is paid, she said, "a borrower could be just a few days overdue and be considered in arrears under the new standard. If someone is delinquent for 90 days, a couple of payments have been missed and you know there is some real problem.

"We don't need criteria so strict that they don't make sense."

Also, she said, setting a goal for delinquent loans of only 5 per cent may not be realistic for schools that now have rates of 20 per cent or more. "Some may be able to reduce their rates substantially, but 5 per cent seems a very strict target when, to my knowledge, there has never before been a percentage set for what is considered an unacceptable delinquency rate."

The proposals, and other changes in the mathematical formula for calculating delinquency rates, would make it hard for almost all dental schools to meet the new standards, she said.

Bruce Baggett, a spokesman for the loan program, defended the proposals. He said the Treasury Department considers delinquent any loan more than 30 days in arrears. The 10-per-cent and 5-per-cent rates proposed for acceptable delinquency rates are in line with commercial banking practices, he said.

He added that a higher delinquency rate would be allowed for nursing loans "because they are smaller than loans under the health-professions program, and so there is not as much money out per borrower."

Ellen Tewksbury, another official of the loan program, said that giving schools more than a year's advance notice of the changes should allow many to reduce their delinquency rates substantially. But, she said, officials are looking at ways to give schools that do not meet the goals extra time to comply without having to turn over repayments to the Treasury.

—CHERYL M. FIELDS

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Spring and Summer Events in Academe: Pages 33-48

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News Summary

Articles on inside pages

Is it possible for an innovative, small private college to merge with a huge state university and still maintain its identity? Story on Page 5.

A dispute over a collective-bargaining election at Harvard University has prompted warnings that faculty members' freedom of speech may be in jeopardy. Story on Page 6.

The Michigan legislature may postpone scheduled payments of state funds to public colleges and universities there. Story on Page 8.

Illegal payments to top college athletes are the exception, not the rule, says an official of the National Collegiate Athletic Association. Story on Page 10.

Despite cuts in other areas of the University of California's budget, microelectronics programs and students will enjoy increased state support. Story on Page 11.

The Reagan Administration will not send Congress its plan to dismantle the Department of Education until it drums up more backing for the idea. Story on Page 19.

Bruce Allen Murphy says he's "astounded" that his new book on the political activities of the late Supreme Court Justices Louis D. Brandeis and Felix Frankfurter has created the stir that it has. Story on Page 25.

Chile's government is reducing support for its colleges and universities drastically, in part because of the ideas of Milton Friedman, the University of Chicago economist. Story on Page 23.

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Universities Urged to Bar Secrecy in Pacts with Private Industry

35 educators and company executives weigh the commercialization of research

By KIM McDONALD

The presidents of five major universities have agreed with the leaders of nine high-technology companies that universities should avoid secrecy in any research contracts or licensing agreements with private industry.

Following a three-day meeting in California on the problems of commercializing research, the university presidents and industry leaders also agreed that any relationship between faculty members and industry "should not be allowed to interfere with their overriding obligation to the university to fulfill their primary responsibilities of teaching and research."

The conference, held at Pajaro Dunes, near Monterey, was called by Donald Kennedy, president of Stanford University, in response to growing concern about the increased number of research agreements between university researchers and biotechnology companies.

Besides Mr. Kennedy, the 35 participants in the meeting included the presidents of the California Institute of Technology, the University of California, Harvard University, and the Massachusetts Institute of Technology; other administrators and faculty members from the five universities; and executives from such companies as the Syntex Corporation, Cetus Corporation, Genentech, and E. I. Dupont de Nemours & Company.

A Stanford spokesman who attended the conference, which was closed to the public, said participants said a number of universities, including Stanford, had been approached by companies with proposals that would require researchers to keep their results secret until the companies could exploit them.

While universities need more interaction with industries because of limited federal support for research, Mr. Kennedy said, "we need it on thoughtfully structured terms."

The participants in the meeting basically

Continued on Page 12, Column 1

► **The text** of the statement by university presidents and industry executives appears on Pages 12 and 13.

► **Soviet** intelligence efforts at U.S. universities will increase if researchers fail to restrict scientific information, the deputy director of the Central Intelligence Agency has told Congress. Story on Page 17.

Quirk in Rules Permits Former Students to Refinance Loans at Low Rates

By ROBERT L. JACOBSON

WASHINGTON

At a time when many college students have lost their eligibility for federally guaranteed loans, hundreds of former students are refinancing their previous loans under much more favorable terms than those now available to new borrowers.

Current charges to new borrowers, which the Reagan Administration has asked Congress to increase, are 9-per-cent annual interest plus a 5-per-cent "origination fee." The maximum repayment period is 10 years.

The former students, however, can choose new repayment schedules of up to 20 years, substantially reduce the size of their monthly payments, and lock in an interest rate of only 7 per cent for the entire period—all with the blessings of the federal government. There are no other financing charges.

'Graduated Repayment' Plans

In addition, the previous borrowers—but not the new ones—can select "graduated repayment" plans to cut the size of their monthly payments even more for several years in exchange for higher payments later.

Although no increase in loan principal is involved, all of a former student's outstanding debts are paid off and he receives what in effect is a new loan—a long-term extension of credit at comparatively low rates.

Those seeming inequities have occurred because recent changes imposed by Congress on the basic Guaranteed Student Loan program do not also apply to a separate new program of loan consolidations administered by the Student Loan Marketing Association. The association, known as Sallie Mae, is a private corporation chartered by Congress in 1972 to increase access to guaranteed loans.

Under legislation passed in the fall of 1980, when the interest rate on guaranteed loans was raised from 7 per cent to 9 per cent, Sallie Mae is authorized to offer pre-

Continued on Page 22, Column 1

CHRONICLE PHOTOGRAPH BY JOHN C. PHILLIPS

> "I think we have to acknowledge the scandal that this central issue of our times has been fundamentally ignored in our universities. There has been a wave of concern about nuclear-weapons education, but it is very belated. Very little of the anti-nuclear discussion came from students or faculty members. It is high time that this is changing." *–Robert Jay Lifton, Yale University*

See story, Page 9

gage in collective bargaining. The enabling legislation died when the Assembly voted, 67 to 27, not to reconsider a bill that had been indefinitely postponed earlier by the lower house.

The legislation, which has failed repeatedly since 1973, was supported by the Association of University of Wisconsin Faculties, an affiliate of the American Federation of Teachers (A.F.L.-C.I.O.) and the 400,000-member state A.F.L.-C.I.O. The bill was strongly opposed by the board of regents, the university administration, and faculty members on several campuses of the university, including Green Bay, Madison, and Parkside.

• Bill Barring Student Suits Fails to Pass in Idaho

A bill that would have prevented students and faculty members at state institutions from suing other state agencies has died in the Idaho Legislature. A version of the bill passed the state House of Representatives last month.

The bill was proposed after the University of Idaho Law School Clinic, which gives students practical legal experience, sued to stop the Idaho Department of Transportation from enlarging a state highway.

Proponents of the bill charged that environmental suits filed by the clinic had cost the state thousands of dollars.

The Idaho Bar Association opposed the bill, which failed to pass the Senate before the Legislature adjourned for the year.

• Fire in Rockefeller U. Lab Alarms New Yorkers

A fire in a cell-biology laboratory at Rockefeller University last week briefly frightened some New York City residents when early news reports on television erroneously said the blaze was endangering radioactive materials.

The university conducts no nuclear research, and the only radioactive materials stored near the area of the fire were low-level isotopes used in tracing biological substances and in some measuring devices, a university spokesman said.

"Even if the fire had reached the radiation equipment, there would have been no danger because of the type and small amounts of radiation involved," he said.

The fire was confined to three or four rooms in the Bronk Laboratory building, he said, although other areas suffered water damage. The cause of the fire was not yet known.

• Stanford Bars Access to Computerized Jokes

Public access to a computer file of some 1,300 jokes at Stanford University has been closed after a complaint from a campus administrator that some of them are racially offensive.

John Sack, manager of the Center for Information Technology, Stanford's computer center, said that the joke file had been left open for additions. The file was assembled as part of a campus system that is used in computer training.

The complaint was lodged by Henry Organ, associate director for foundations in the Stanford Office of Development, whose secretary discovered the jokes while in a computer-training class.

• 'Hell Week' Accident Kills Sophomore at Towson State

A sophomore fraternity pledge at Towson State University died last week after a car he was driving ran off an expressway near the campus and turned over. Two passengers were injured, one seriously, a university spokesman said.

Victor M. Siegel, of Baltimore, was killed in the accident.

The three men had been returning from a trip to gather signatures of fraternity alumni as one requirement for joining Alpha Omega Lambda, a local group that was recently forbidden to use campus facilities after the university received complaints about alleged hazing by its members.

The early-morning accident occurred during "Hell Week," in which the fraternity's pledges were allegedly deprived of sleep.

The three students, who reportedly had not been drinking that evening, were fulfilling another pledging requirement by wearing costumes.

Mr. Siegel was dressed as a Playboy bunny, and his passengers as a boxer and a skindiver.

• Brown's Choice Out of Race for Cal. Chancellorship

August F. Coppola, who was supported by Gov. Edmund G. Brown, Jr., for the chancellorship of the California State University system, has been eliminated from consideration by a search committee of the system's board of trustees.

Mr. Coppola's name reportedly is not on a list of about 28 candidates being interviewed by the committee to succeed Glenn S. Dumke, who is retiring.

Mr. Coppola, a member of the board, is the brother of Francis Ford Coppola, the filmmaker. Governor Brown reportedly tried to fill vacancies on the board with appointees who supported Mr. Coppola for the chancellorship. The governor denied those reports.

UNIVERSITY OF MISSOURI AT ST. LOUIS

Arnold B. Grobman

• Chancellor's Supporters Win Vote at U. of Missouri

Faculty members at the University of Missouri at St. Louis have rejected, 150 to 108, a resolution asking for the resignation of Arnold B. Grobman, above, the campus's chancellor.

Some liberal-arts faculty members accused Mr. Grobman of cutting back budgets for their departments to pay for the development of new programs in other disciplines, a university spokesman said.

The situation was aggravated by reductions in the state's allocation to the university and by a plan—later modified—to raise faculty salaries that would have required decreases in other spending for academic programs, the spokesman said.

• Student Suspected of Arson at University of Arizona

Following a series of suspicious fires and false alarms at the University of Arizona, a freshman who worked part-time for campus police was arrested last week and charged with five counts of arson.

The student, Cynthia Louise Wong, 18, of Ann Arbor, Mich., was employed to check buildings after hours to make sure they were locked. She was apprehended after campus police turned the arson investigation over to the Tucson fire department.

The fires, which were set in several buildings, caused damage estimated at more than $160,000, a university spokesman said.

• Fewer Sabbaticals Granted in the Humanities

A decline in the number of sabbatical leaves granted to faculty members in the humanities was reported last month by the American Council on Education.

An A.C.E. survey of faculty members in the humanities, financed by the National Endowment for the Humanities, found a decline of 3.1 per cent in the number of sabbaticals granted in 1979-80, compared with the number two years earlier. In the same period, the number of leaves without pay granted to faculty members in the humanities increased by 15.9 per cent, the survey found.

The total number of full-time faculty members in the humanities in 1979-80 was estimated at 83,500, of whom 6.4 per cent took sabbatical leaves during the year and 3.4 per cent took leaves without pay.

• MIT Students Plan Ad Against Congressmen

Students at the Massachusetts Institute of Technology plan to take a full-page advertisement this month in the New York *Times* to print the names "of the 10 worst Congressmen" as well as all Congressmen who voted affirmatively in the first round of student-aid cuts last fall.

Organizers say they will urge campus newspapers across the country to reprint the ad to generate student opposition to the budget cuts and to encourage more students to vote in next fall's Congressional races.

• Wichita State Dance Director Files $1.5-Million Suit

The director of the dance program at Wichita State University has filed a $1.5-million lawsuit in federal court charging that she was denied due process by a university committee that recommended she not be awarded tenure.

Chifra Holt, who was hired by the university in 1979, says also that she was discriminated against because she is Jewish and female.

One member of the tenure committee, an instructor in the dance program, stated that she wanted Ms. Holt to leave the university, the lawsuit charges. It asserts that the dean of the college of fine arts and the vice-president for academic affairs knew of that attitude before they appointed the woman to the committee, and that the appointment violated Ms. Holt's right to due process. A university spokesman declined to comment.

• Correction

In a Fact-File in *The Chronicle* of March 31, listing federal funds for colleges and universities in fiscal 1980, the total for research and development at all institutions should be $4,155,366,000. Total federal obligations at all institutions should be $8,319,815,000.

Notes from Tucson

UNIVERSITY OF ARIZONA

"Old Main," the original building on the University of Arizona campus, now houses administrative offices.

TUCSON, ARIZ.

Palm trees, their high fronds rustling in the warm desert breeze, line the long avenue that bisects the campus of the University of Arizona. They provide a motif often repeated in the university's publications and fondly recalled by its alumni.

But palm trees are not native to Arizona's deserts. Neither are the lawns—thin by Eastern standards—that the university maintains in defiance of Tucson's arid climate.

The trees and the grass survive because the university, which has its own wells, can afford to squander water on them: On this old campus, laid out before the garden sprinkler became a common item, lawns—and flowerbeds and shrubberies and trees—are surrounded by low earthen berms and are flooded periodically with several inches of water from underground pipes.

Such a system of irrigation gives the impression of small lakes appearing and disappearing around the campus like mirages in a cartoon Sahara. But to some Tucson residents, worried by a water shortage that is likely only to worsen in the decades ahead, these transient lakes and the green-brown lawns they support seem decadencies forced on the parsimonious desert by improvident humans.

People who choose to live in this environment should content themselves with its natural beauty, some residents say, rather than try to "improve" it with thirsty lawns and delicate flowerbeds. Here in Pima County, they say, where the water table is thought to be dropping several feet every year, Kentucky bluegrass is a luxury that the environment cannot, in the long run, pay for.

A Shapely Relic

The campus was not always so green. In 1885, when the territorial legislature authorized a university here, it was a little more than a lonely expanse of desert scrub in a valley surrounded by blue mountains. Six years later the first building, now called Old Main, was opened to house the university's two original divisions, the school of agriculture and the school of mines.

Old Main still stands, a shapely relic of the the old Southwest preserved among the boxlike constructions of recent years. It is a long brick building with a lively roofline that climbs over towers, dances around chimneys, and slides gently across the broad porches that, in the days before air-conditioning, kept the hot summer sun off the university's first six staff members and 32 students.

Now the unused porches overlook cactus gardens, where the succulents that once grew wild here in the Sonoran desert are carefully tended by the university's gardening crews. The cacti are called agave, saguaro, prickly pear, barrel, purple cholla, antler cholla, and other names—some of them Spanish as though to remind latecomers that for generations this part of the world belonged to Spain. Near them live the ocotillo, a tree that sheds its leaves during times of drought, and the paloverde, whose fragile branches form a delicate tracery of light-green bark.

Ascetics and Friars

The shapes of the cacti and the desert trees are as marvelous as the sounds of their names. The saguaro is tall and thin, almost ascetic; the barrel cactus is short and rotund, like a jolly Friar Tuck of the desert. The prickly pear and the cholla, which have needles and misshapen appendages sticking out every which way, look otherworldly.

The campus, which covers 320 acres, seems to have no end of exotic plants and trees—some native, some imported to see if they could survive in this climate, some brought just for show. There are violets, irises, and roses; orange trees, sweet-smelling in the spring though their fruit is good only for making marmalade; olive trees, whose fruit can be gathered and pressed for oil; tall, narrow cypress trees, favored here as windbreaks; even a tree grown from a seed that went to the moon on Apollo 14.

The prudence—if not the morality—of maintaining so vast a garden in the desert may indeed be open to question. But it is nonetheless a beautiful place, with its cacti, its palms, and its vanishing lakes. A pale visitor from the chilly East, lingering here among the tanned students and warm sunshine, finds it easy to appreciate.

—LAWRENCE BIEMILLER

Adult Education: Bulk of Costs Borne by Students

NEW YORK

About 60 per cent of the total costs of continuing-education programs offered by colleges and universities come from tuition and fees. The balance comes largely from state and local governments, a study of the financing of adult education and training has found.

Almost all the costs of continuing education offered by professional associations and proprietary schools are paid by students. However, the study found, students enrolled in proprietary schools receive "sizable" amounts of federal and state aid to help with their tuition. Professional associations defray some expenses by using volunteer instructors.

Businesses, industrial companies, and unions pay almost all the costs of education and training for their employees. "They prefer it that way," according to the report of the study, which was conducted by the Institute of Higher Education at Columbia University Teachers College.

College Courses Criticized

Most companies are reluctant to get involved with public higher-education institutions because "they are worried about alliances that might interfere with training and general corporate objectives," said Richard E. Anderson, director of the institute and one of the authors of the report. Also, he said, "many trainers openly criticize college courses as not relevant," although they hire college faculty members to teach in programs.

The report was based on information from about 200 directors of continuing-education and training programs in higher-education institutions, proprietary and public schools, business and industry, professional associations, and community organizations across the country, as well as individual adult-education instructors, public officials, and others. The research was supported by a grant from the Exxon Education Foundation.

Colleges and universities provide about 40 per cent of all continuing-education programs, while business and industry offer about 10 per cent, the study found. Proprietary schools and professional associations together provide 5 per cent of the offerings.

The largest share of total continuing-education costs goes toward "putting an instructor in the classroom," said Mr. Anderson, who is an associate professor of higher education at Teachers College.

$10 to $60 an Hour

The study found that average compensation for part-time faculty members ranged from $10 an hour, paid by community organizations, to $60 an hour, paid by companies. Colleges paid about $20 an hour.

Mr. Anderson said many instructors for business and industry and professional associations were college faculty members. "These organizations pay professors at a higher rate than they receive on their home campuses, on either a full- or part-time basis. Some college faculty members earn over $100 per class hour teaching for corporations," he said.

For the most part, the cost of instructional materials is "modest," the study found. Although the research indicated that colleges spent "virtually nothing" for books and supplies, Mr. Anderson speculated that those materials "escaped the accounting system" because they were purchased directly by students.

The complete report, *The Costs and Financing of Adult Education and Training*, is available from Lexington Books, 125 Spring Street, Lexington, Mass. 02173, for $30.95.

—BEVERLY T. WATKINS

FACT-FILE

U.S. Medical Schools' Enrollment

Medical schools	Medical students			Residents	Basic science students			Other*	Grand total
	Men	Women	Total		Master's	Doctoral	Postdoc.		
Alabama									
University of Alabama	540	146	**686**	448	22	107	0	1,204	**2,467**
University of South Alabama	217	57	**274**	122	0	30	10	348	**784**
Arizona									
University of Arizona	252	104	**356**	260	5	101	28	153	**903**
Arkansas									
University of Arkansas	448	106	**554**	281	40	23	0	0	**898**
California									
University of California									
Davis	250	150	**400**	563	16	38	0	217	**1,234**
Irvine	275	112	**387**	606	5	36	35	0	**1,069**
Los Angeles	493	192	**685**	1,409	17	193	91	1,988	**4,383**
San Diego	364	118	**482**	405	17	90	27	53	**1,074**
San Francisco	419	235	**654**	1,199	40	255	153	824	**3,125**
Loma Linda University	475	133	**608**	445	30	13	7	804	**1,907**
University of Southern California	457	123	**580**	906	11	71	36	1,863	**3,467**
Stanford University	265	128	**393**	402	2	183	173	455	**1,608**
Colorado									
University of Colorado	364	161	**525**	—	255	98	56	148	**1,082**
Connecticut									
University of Connecticut	240	100	**340**	304	46	56	59	0	**805**
Yale University	320	134	**454**	319	8	143	178	310	**1,412**
District of Columbia									
Georgetown University	636	189	**825**	308	89	108	14	560	**1,904**
George Washington University	424	186	**610**	376	—	—	—	213	**1,199**
Howard University	278	218	**496**	264	28	75	0	708	**1,571**
Florida									
University of Florida	351	115	**466**	288	14	98	30	1,319	**2,215**
University of Miami	522	125	**647**	487	21	66	49	20	**1,290**
University of South Florida	226	62	**288**	271	0	25	1	114	**699**
Georgia									
Emory University	355	111	**466**	582	11	50	0	1,135	**2,244**
Medical College of Georgia	586	150	**736**	—	5	42	0	814	**1,597**
Morehouse College† ‡	29	33	**62**	0	9	8	0	155	**234**
Hawaii									
University of Hawaii	201	92	**293**	191	59	58	6	1,350	**1,957**
Illinois									
University of Chicago	332	99	**431**	334	28	271	142	0	**1,206**
University of Health Sciences—Chicago Medical School	387	143	**530**	142	21	75	13	84	**868**
University of Illinois	1,065	326	**1,391**	905	9	181	31	232	**2,749**
Loyola University of Chicago	316	135	**451**	251	18	79	22	0	**821**
Northwestern University	482	222	**704**	634	24	87	6	1,741	**3,196**
Rush University	353	158	**511**	283	0	28	0	0	**822**
Southern Illinois University	156	61	**217**	132	149	72	11	590	**1,171**
Indiana									
Indiana University	938	306	**1,244**	441	33	120	18	1,962	**3,818**
Iowa									
University of Iowa	530	181	**711**	415	86	165	99	3,170	**4,646**
Kansas									
University of Kansas	539	173	**712**	476	251	70	0	316	**1,825**
Kentucky									
University of Kentucky	334	97	**431**	292	9	44	12	1,891	**2,679**
University of Louisville	421	149	**570**	310	81	54	17	727	**1,759**
Louisiana									
Louisiana State University									
New Orleans	580	149	**729**	—	20	60	27	0	**836**
Shreveport	313	76	**389**	169	11	15	0	102	**686**
Tulane University	449	164	**613**	378	3	41	13	0	**1,048**
Maryland									
Johns Hopkins University	365	103	**468**	422	39	114	84	20	**1,147**
University of Maryland	542	176	**718**	395	28	52	49	797	**2,039**
Uniformed Services University of the Health Sciences	336	94	**430**	0	3	42	34	0	**509**
Massachusetts									
Boston University	407	185	**592**	449	30	138	30	2,780	**4,019**
Harvard University	477	196	**673**	1,306	0	185	0	38	**2,202**
University of Massachusetts	277	143	**420**	344	0	28	29	267	**1,088**
Tufts University	420	200	**620**	595	5	59	0	670	**1,949**
Michigan									
University of Michigan	720	255	**975**	475	37	216	99	8,661	**10,463**
Michigan State University	258	171	**429**	143	53	77	0	1,072	**1,774**
Wayne State University	763	242	**1,005**	579	49	90	30	955	**2,708**
Minnesota									
Mayo Graduate School of Medicine	120	42	**162**	662	0	18	61	275	**1,178**
University of Minnesota									
Minneapolis	774	300	**1,074**	945	62	176	18	1,567	**3,842**
Duluth‡	61	36	**97**	24	3	4	1	549	**678**
Mississippi									
University of Mississippi	494	104	**598**	259	19	43	0	450	**1,369**
Missouri									
University of Missouri									
Columbia	356	97	**453**	253	30	42	28	2,155	**2,961**
Kansas City	189	141	**330**	176	0	0	0	0	**506**
Saint Louis University	477	136	**613**	296	16	68	19	524	**1,536**
Washington University	403	130	**533**	509	0	185	0	273	**1,500**
Nebraska									
Creighton University	374	79	**453**	135	12	8	2	1,465	**2,075**
University of Nebraska	400	146	**546**	259	39	55	6	433	**1,338**
Nevada									
University of Nevada	144	50	**194**	39	3	18	5	64	**323**
New Hampshire									
Dartmouth College	129	74	**203**	148	0	37	18	165	**571**
New Jersey									
U. of Medicine and Dentistry of N.J.									
Newark	448	192	**640**	519	2	72	6	176	**1,415**
Piscataway	302	124	**426**	175	14	71	16	33	**735**

in Medicine and Science, 1980-81

Medical schools	Medical students			Residents	Basic science students			Other*	Grand total
	Men	Women	Total		Master's	Doctoral	Postdoc.		
New Mexico									
University of New Mexico	205	94	299	237	18	31	19	445	1,049
New York									
Albany Medical College	380	134	514	306	14	48	30	84	996
Columbia University	428	157	585	1,156	55	131	0	1,193	3,120
Cornell University	311	131	442	447	1	125	0	0	1,015
Mount Sinai School of Medicine of City University of New York	311	143	454	870	0	83	0	47	1,454
New York Medical College	545	209	754	546	78	44	0	10	1,432
New York University	519	191	710	636	1	107	3	0	1,457
University of Rochester	297	101	398	307	45	150	86	421	1,407
State University of New York									
Buffalo	399	184	583	435	33	137	37	3,149	4,374
Downstate Medical Center	699	201	900	377	3	110	18	284	1,692
Health Science Center, Stony Brook	158	108	266	160	0	78	46	2,372	2,921
Upstate Medical Center	435	163	598	—	0	0	0	249	847
Yeshiva University	492	227	719	1,054	0	143	109	233	2,258
North Carolina									
Duke University	332	154	486	493	6	187	68	593	1,833
East Carolina University	119	31	150	74	0	8	10	56	298
University of N.C. at Chapel Hill	433	208	641	374	133	213	69	1,697	3,127
Wake Forest University	335	96	431	303	17	73	15	137	976
North Dakota									
University of North Dakota	173	43	216	84	15	18	4	648	985
Ohio									
Case Western Reserve University	398	201	599	601	76	88	51	826	2,241
University of Cincinnati	560	213	773	467	59	129	24	392	1,844
Medical College of Ohio at Toledo	291	142	433	180	0	35	3	664	1,315
Northeastern Ohio Universities College of Medicine	167	69	236	466	1	16	5	0	724
Ohio State University	620	185	805	246	68	106	20	—	1,245
Wright State University	247	79	326	304	40	21	3	1,885	2,579
Oklahoma									
University of Oklahoma	574	133	707	375	30	80	0	1,741	2,933
Oral Roberts University†	69	16	85	0	17	0	0	327	429
Oregon									
Oregon Health Sciences University	343	118	461	401	4	47	25	414	1,352
Pennsylvania									
Hahnemann Medical C. and Hospital	551	179	730	300	255	111	0	0	1,396
Thomas Jefferson University	728	169	897	324	23	68	0	226	1,538
Medical College of Pennsylvania	192	269	461	188	31	36	0	9	725
Temple University	512	219	731	288	21	67	0	415	1,522
University of Pennsylvania	478	197	675	828	0	338	85	673	2,599
Pennsylvania State U., Hershey Medical Center	280	108	388	182	20	76	0	202	868
University of Pittsburgh	406	137	543	394	3	74	0	0	1,014
Rhode Island									
Brown University	173	82	255	426	7	45	0	0	733
South Carolina									
Medical University of South Carolina	509	148	657	331	21	88	44	1,391	2,532
University of South Carolina	118	25	143	113	0	8	3	35	302
South Dakota									
University of South Dakota	187**	46	233	—	—	—	—	—	233
Tennessee									
East Tennessee State University†	150	28	103	57	7	10	0	0	177
Meharry Medical College	343	174	517	74	2	22	5	184	804
University of Tennessee Center for the Health Sciences	647	142	789	531	20	70	0	885	2,295
Vanderbilt University	337	84	421	366	6	116	85	649	1,643
Texas									
Baylor College of Medicine	497	169	666	696	0	120	109	91	1,682
University of Texas									
Health Science Center at Dallas	661	153	814	638	122	175	82	133	1,964
Medical Branch at Galveston	597	207	804	353	11	116	33	621	1,938
Health Science Center at Houston	536	177	713	289	3	44	83	304	1,436
Health Science Center at San Antonio	539	205	744	412*	13	79	33	1,336	2,617
Texas A&M University	100	27	127	100	2	5	12	0	246
Texas Tech University	220	62	282	181	15	27	6	0	511
Utah									
University of Utah	336	65	401	320	50	62	31	927	1,791
Vermont									
University of Vermont	274	87	361	162	11	38	17	428	1,017
Virginia									
Eastern Virginia Medical School of the Eastern Virginia Authority	189	86	275	193	0	36	12	33	549
University of Virginia	426	111	537	319	3	105	52	662	1,678
Virginia Commonwealth University	506	171	677	564	87	128	14	1,172	2,642
Washington									
University of Washington	510	217	727	482	0	165	136	4,405	5,915
West Virginia									
Marshall University	93	24	117	29	8	2	0	30	186
West Virginia University	268	77	345	164	25	74	14	1,447	2,069
Wisconsin									
University of Wisconsin	471	177	648	485	50	132	95	6,773	8,183
Medical College of Wisconsin	564	194	758	406	22	55	0	2,380	3,621
Puerto Rico									
Universidad Central del Caribe Escuela de Medicina de Cayey†	131	42	173	58	0	0	0	0	231
Ponce School of Medicine	66**	25	91	—	—	—	—	—	91
University of Puerto Rico	366	214	580	317	21	17	0	437	1,372
Total	**48,124**	**17,373**	**65,497**	**46,296**	**3,522**	**9,842**	**3,485**	**92,586**	**221,208**

* Includes students in allied health, arts and sciences, and other related fields.
** Does not include continuing-education course registrants.
† Developing medical school, operating with provisional accreditation.
‡ School of basic medical science.
— School did not report any students in this category.

SOURCE: JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION

Association Faces Black Issues at All Colleges

WASHINGTON

Leaders of the nation's predominantly black colleges began to notice a few years ago that they were being outnumbered at their annual trade association meetings by black administrators from predominantly white campuses.

Some became concerned that their organization, the National Association for Equal Opportunity in Higher Education, was drifting away from its original mission as an association for black colleges.

Others argued that although the association had been established in 1969 as the major voice in Washington for black colleges, it had the duty to address the problems faced by the large number of blacks who were moving into previously all-white institutions.

The debate reflected a delicate relationship that had developed between black educators on black campuses and those on white campuses since white colleges began to integrate in the late 1960's and early 1970's. The affirmative-action plans that led to increased admissions and jobs for blacks on white campuses were viewed by some as a threat to the existence of black institutions.

N.A.F.E.O., caught in the middle of the debate, has been moving increasingly in recent years to expand its role as a "coordinator" for all issues concerning blacks in higher education.

The broadening function of N.A.F.E.O. became evident at the association's annual conference here last month. For the first time, the meeting included formal seminars on the problems of blacks on white campuses.

Cuts in Student Aid

One seminar included several reports on the social and academic problems that were said to result in a high dropout rate of black students at predominantly white colleges. Another session focused on the difficulties black faculty members have in obtaining tenure on white campuses, and on the problems of black administrators who find themselves locked into "dead end" positions—usually in minority-affairs offices.

The overriding concern, however, expressed by administrators from both black and white campuses, was the effect of cuts in federal student-aid funds and other programs that many black students rely on to enroll in college.

The latest cuts in higher-education programs proposed by the Reagan Administration could lead to a 25- to 50-per-cent reduction in black student enrollment in all of higher education, said Prezell R. Robinson, president of N.A.F.E.O. and of St. Augustine's College.

N.A.F.E.O. "has always been concerned about the broader issues concerning blacks in higher education, wherever they are," said Samuel L. Myers, executive director of the association.

But until this year, Mr. Myers said, the N.A.F.E.O. annual meetings had focused almost exclusively on the concerns of black colleges.

He said pressure to address the concerns of blacks on white campuses had increased as attendance at the conference became dominated by administrators from white colleges. Conference participants from white colleges now outnumber those from black colleges by about two to one.

He added that the association was resisting attempts by predominantly white institutions to use it as a source for candidates for administrative and faculty positions on those campuses.

"If we were to agree to that, we would be committing suicide," he said. "We are still an association of black colleges."

—LORENZO MIDDLETON

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News Summary

Articles on inside pages

LEO BAECK INSTITUTE

Albert Einstein may have been wrong, according to three physicists at the University of Arizona. Story on Page 3.

Two anthropologists involved in a dispute over precisely how man evolved concur on the dangers of creationism. Story on Page 5.

Responding to a critical report on its civil-rights enforcement, the Justice Department called for "more realistic" remedies for racial bias. Story on Page 13.

Athletic scholarships should extend through an athlete's graduation, not just through his eligibility, members of the Organization of American Historians were told. Story on Page 6.

The number of journals is growing rapidly and scholars are beginning to ask if there is some systematic way to rank them. Story on Page 21.

The leader of Poland's outlawed student union has appealed for international student support. Story on Page 19.

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New U.S. Secrecy Order Will Limit Access to Papers, Historians Say

Critics assail rules, say they reverse a 30-year trend toward less classification

By KIM McDONALD

WASHINGTON

Historians and other scholars say a new executive order signed by President Reagan will limit their access to government documents and make it easier for officials to keep information secret indefinitely.

Mr. Reagan said the 11-page order, which was published last week, "enhances protection for national-security information without permitting excessive classification of documents by the government."

Critics, however, said the order would increase classification of documents, remove any schedule for declassifying them, and reverse a 30-year trend toward reducing government secrecy.

"It clearly sends a signal [to government officials] that as far as the President is concerned, not enough material is being classified," said Allan R. Adler, counsel for the Center for National Security Studies.

The new order—which replaces one signed by President Carter in 1978—creates three new categories of secret information and eliminates the Carter Administration's "balancing test." That test required government officials to weigh the public interest against national-security concerns when deciding whether to classify or declassify information.

It will also allow government officials to reclassify previously declassified information if the material is still considered sensitive and can "reasonably be recovered."

The new order does continue President Carter's policy of protecting basic scientific information from classification. A draft of Mr. Reagan's order, which was circulated on Capitol Hill earlier this year, would have eliminated the exemption of basic-research data from classification. But strong lobbying efforts by scientists' groups and higher-education interests, including the Association of American Universities, helped to reinstate it.

"The serious threat to scientific research has been put in abeyance" by the inclusion of the exemption, said William D. Carey, executive officer of the American Association for the Advancement of Science.

These are among the major changes in Mr. Reagan's order:

▶ It introduces three new categories of information that can be classified—material on "the vulnerabilities or capabilities of systems, installations, projects, or plans relating to the national security"; cryptol-

Continued on Page 14, Column 1

'Treasure' of New Information on 1911 Revolution Revealed at Historic Meeting of Chinese Scholars

CHICAGO

A "treasure" of previously undisclosed research material about the Chinese Revolution of 1911 has been identified in the U.S. by leading historians from Nationalist China and the People's Republic of China, according to the principal organizer of an unprecedented discussion here this month among Taiwanese and Communist Chinese scholars.

The disclosures included a description of archives controlled by the Nationalist Party's historical commission and a report about the collection and use of documents in China. They were presented before a packed house of about 500 people at the annual meeting of the Association for Asian Studies.

The organizer, Winston W. Hsieh, associate professor of history at the University of Missouri at St. Louis, said special efforts had been made to identify the discussion as apolitical. It included five scholars from Taiwan and five from the mainland, as well as China scholars from several other countries.

'Fantastic Success'

Calling the discussion a "fantastic success," Mr. Hsieh said the fact that it had taken place at all, in light of ideological conflicts between the governments of China and Taiwan, was remarkable. Neither side wanted even the appearance of a "bilateral" meeting, he said, and the American hosts were uncertain "to the last minute" whether it would be held. The organizers also had feared the possibility of a disruption, he added, but none occurred.

Mr. Hsieh said the participation of the two groups of scholars had shown that "the Communist side is ready for civilized scholarly talk [and] the Nationalists are more self-confident."

On the subject of the Revolution of 1911, the scholars presented conflicting interpretations that are well known to historians. The Communist view is that the revolution, which led to the overthrow of the Manchu dynasty, had "bourgeois" origins, while the Taiwan view is that the struggle was nationalistic.

Despite such differences, Mr. Hsieh said he agreed with Harold Z. Schiffrin, a China scholar from the Hebrew University of Jerusalem, that the discussion here pointed to much "common ground" for historical analysis. It showed, for example, that both sides "honor" the revolution and its leader, Sun Yat-sen, and believe that the revolution was "progressive" and "good for China," Mr. Hsieh said.

—ROBERT L. JACOBSON

Personal Qualities Said to Play No Key Admissions Role

WASHINGTON

Personal qualities of college applicants, such as leadership and creativity, generally do not play a decisive role in their admission to selective institutions, a study sponsored by the College Board and the Educational Testing Service has indicated.

Such qualities and the applicants' backgrounds may sometimes be crucial in gaining admission for borderline candidates or those with slim chances of being accepted on academic grounds alone, the study showed, but on the whole it confirmed the traditional view that academic qualifications—mainly excellent grades in high school and high scores on entrance examinations—are the most important criteria for admission.

The study, by Warren W. Willingham and Hunter M. Breland, E.T.S. research psychologists, examined detailed information about 25,000 applicants to nine selective private institutions, mostly in the East and Midwest, and then reviewed the factors leading to the enrollment of about 5,000 of them as entering freshmen in 1979. A follow-up study is planned for the students' senior year, 1982-83.

Despite the finding that personal qualities usually are not decisive in admissions, officials of the College Board said they agreed with the authors that colleges need a better understanding of those qualities, especially in light of a projected decline in the traditional college-age pool.

"In future years," the College Board said in a summary of the study, "recruitment rather than selection seems to hold the greatest promise for shaping the student body at most institutions."

The study suggested that colleges could

Continued on Page 12, Column 3

CHRONICLE SURVEY

Freshman Applications Down 2 Pct. from Last Year, Survey Shows

A majority of colleges and universities have received fewer freshman applications through February than at the same time a year ago, a new Chronicle Survey has found.

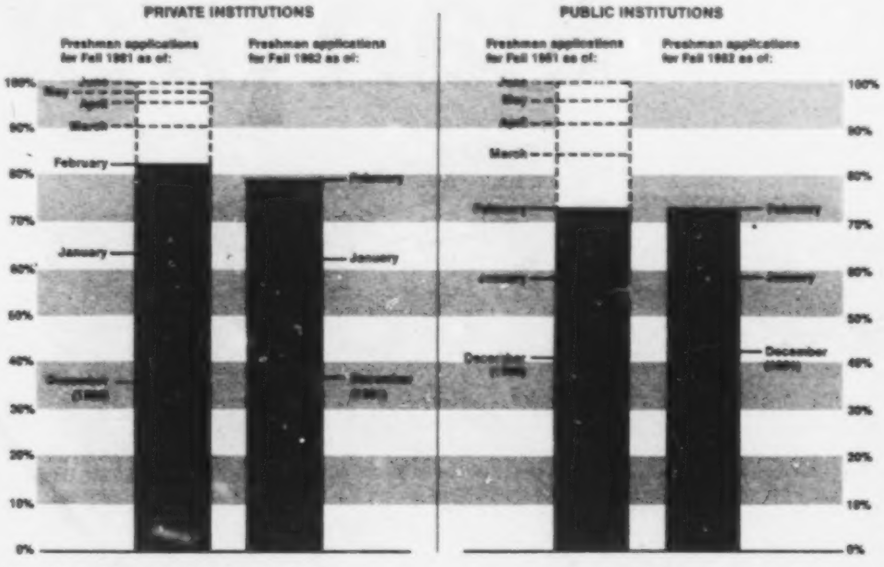
The survey, based on a stratified random sample of 287 four-year colleges and universities, found a decline in applications at 53.9 per cent of the institutions.

Applications were off at 57.6 per cent of the private colleges and universities and at 47 per cent of the public institutions.

For all institutions, public and private, total applications at the end of February were down 2 per cent from the total on the same date a year earlier. At a fourth of the institutions, the decreases exceeded 10 per cent. Private colleges and universities, on the average, reported a decline of 2.7 per cent in applications received, compared with a decline of 0.8 per cent reported by the public institutions.

The largest decreases were at public institutions in the Southeast (down 10.7 per cent) and at private institutions in the West and Southwest (down 4.2 per cent). The largest gains were at public universities with 20,000 students or more (up 3.9 per cent).

The survey of freshman-application rates was conducted for *The Chronicle* by John Minter Associates, a research organization specializing in higher-education studies, Box 107, Boulder, Colo. 80306.



Note: All percentages are of the June, 1981, total

CHRONICLE CHART BY PETER H. STAFFORD

Changes in Number of Freshman Applicants

February 28, 1982, compared with February 28, 1981

	Change in average (a)	Per cent reporting increase	Per cent reporting decrease	Change		
				Low (b)	Median (c)	High (d)
Private colleges and universities						
Research and Ph.D.-granting	− 0.3%	52.6%	47.4%	− 4.7%	− 0.3%	+ 1.8%
Comprehensive	− 1.6%	43.3%	56.7%	−10.9%	− 2.9%	+ 5.4%
Liberal arts	− 3.1%	40.2%	58.8%	−15.0%	− 2.8%	+ 5.8%
Regions						
Northeast and Mid-Atlantic	− 1.5%	48.4%	51.6%	−10.9%	− 0.6%	+ 5.4%
Great Lakes and Plains	− 0.4%	43.1%	55.4%	− 7.6%	− 1.4%	+ 6.3%
Southeast	− 1.7%	40.6%	59.4%	−16.2%	− 6.0%	+ 6.1%
West and Southwest	− 4.2%	26.3%	73.7%	−19.2%	− 6.7%	− 0.3%
Enrollment						
500 – 999	− 4.1%	40.8%	57.1%	−20.8%	− 4.4%	+16.6%
1,000 – 2,499	− 2.2%	39.5%	60.5%	−11.6%	− 1.7%	+ 4.2%
2,500 – 4,999	− 0.8%	48.1%	51.9%	− 9.8%	− 3.0%	+ 7.0%
5,000 – 9,999	+ 0.4%	55.6%	44.4%	− 4.1%	+ 0.4%	+ 1.8%
10,000 and over	− 3.4%	42.9%	57.1%	−14.4%	− 4.7%	+ 4.3%
All private institutions	**− 2.7%**	**41.6%**	**57.3%**	**−11.3%**	**− 1.9%**	**+ 5.5%**
Public colleges and universities						
Research and Ph.D.-granting	+ 2.2%	56.1%	43.9%	− 4.3%	+ 2.1%	+13.9%
Comprehensive	− 1.8%	51.9%	48.1%	−13.0%	+ 1.8%	+ 9.7%
Regions						
Northeast and Mid-Atlantic	+ 8.1%	66.7%	33.3%	− 2.9%	+ 2.9%	+12.0%
Great Lakes and Plains	+ 0.9%	56.8%	43.2%	− 7.0%	+ 2.1%	+10.6%
Southeast	−10.7%	37.0%	63.0%	−13.6%	− 2.1%	+ 7.0%
West and Southwest	+ 3.6%	60.0%	40.0%	−10.9%	+ 7.6%	+18.3%
Enrollment						
500 – 2,499	− 2.7%	70.0%	30.0%	−18.6%	+ 4.2%	+29.5%
2,500 – 4,999	+ 4.5%	63.6%	36.4%	− 7.4%	+ 4.1%	+16.5%
5,000 – 9,999	− 4.5%	47.8%	52.2%	−17.8%	− 2.2%	+ 8.9%
10,000 – 19,999	− 1.5%	40.0%	60.0%	−10.8%	− 1.3%	+ 4.1%
20,000 and over	+ 3.9%	62.9%	37.1%	− 5.1%	+ 6.4%	+14.8%
All public institutions	**− 0.8%**	**53.0%**	**47.0%**	**− 7.8%**	**+ 1.9%**	**+12.5%**
All institutions	**− 2.0%**	**45.8%**	**53.9%**	**−10.4%**	**− 0.7%**	**+ 7.8%**

(a) Percentage change in mean number of applications by February 28, 1982, compared with the mean for a year earlier.
(b) The bottom one-fourth of the institutions reported changes smaller than the percentages shown.
(c) Half of the institutions reported changes greater than the percentages shown.
(d) The top one-fourth of the institutions reported changes greater than the percentages shown.
Note: Survey data are from a stratified random sample of 287 four-year colleges and universities, excluding those with enrollments under 500.

SOURCE: SURVEY FOR THE CHRONICLE BY JOHN MINTER ASSOCIATES

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News Summary

Articles on inside pages

Anti-nuclear demonstrations by students and faculty members will mark "Ground Zero Week" on campuses around the country. Story on Page 3.

Despite its old Moviolas and a cramped editing room, the film school at the University of Southern California is considered the leader in training commercial film makers. Story on Page 5.

Poets writing today are "satisfied with small goals," the poet Donald Hall told the annual meeting of the Associated Writing Programs. Story on Page 6.

Both California and Oregon have encountered difficulties in hiring chancellors for college systems. Story on Page 8.

The No. 2 official in the Department of Education has been forced to resign after 10 months in office. Story on Page 9.

The research chief of the Environmental Protection Agency violated agency policy when he appeared to facilitate the review of a former associate's research proposal, a report has found. Story on Page 9.

Art books are a staple of the publishing program at Cornell University Press since its alliance with England's Phaidon Press. Story on Page 15.

Guggenheim fellowships have been awarded to 277 scholars, scientists, and artists. List of winners on Pages 21 and 22.

Polish leaders have accepted the resignation of the rector of Warsaw University, an opponent of new restrictions on the universities. Story on Page 13.

Academic scientists in Australia are calling for increased government support for basic research. Story on Page 13.

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Reagan's Charge that Public Was 'Misled' on Loan Cuts Draws Fire from Colleges

Despite President's radio plea, Congress appears unlikely to approve his proposals

By JANET HOOK

WASHINGTON

President Reagan, defending his proposed cuts in student aid in a national radio address, seriously understated the total impact of his plan on students, higher-education officials and Congressional education leaders charged last week.

The President asserted, in a five-minute speech broadcast from Barbados, that his critics had misled the American public about the effects of his controversial proposals.

But the education officials responded that Mr. Reagan had played down the effects of his proposed cuts in the Guaranteed Student Loan program, and had failed to mention deep cuts he has proposed in other student-assistance programs.

Mr. Reagan's speech came at a time when the Administration's education budget is in serious trouble on Capitol Hill. Legislators have been swamped with letters from constituents opposing further student-aid cutbacks, and the likelihood that Congress will approve any of the President's major proposals this year is considered negligible.

The text of President Reagan's remarks on student aid appears on Page 11.

Joel C. Packer, assistant director of governmental relations at the National Association of State Universities and Land-Grant Colleges, said the fact that President Reagan chose to focus on student aid in a nationally broadcast address "shows how nervous the Administration is about the chances of their proposals' passing Congress."

Although President Reagan began his speech with comments about his proposal to provide aid to Caribbean countries, he took many observers by surprise by devoting the bulk of the talk to defending his student-aid policies. His aides said the speech was intended to counter what they called "misinformation" disseminated by critics of the student-aid proposals.

In its budget request for fiscal 1983, the Administration has proposed cutting the Department of Education's $6-billion student-aid budget by almost one-third, including a 46-per-cent reduction in spending for Pell Grants and campus-based aid. In the guaranteed-loan program, the President's plan would save the government

Continued on Page 11, Column 1

'Computer Literacy' Gaining Place in Undergraduate Curriculum

By JACK MAGARRELL

Computers rapidly are becoming an essential part of the general college curriculum. At several institutions, "computer literacy" is now required for graduation. At many others, computers are being used heavily by students and faculty members in every field of study.

The idea that all students "should be acquainted with the computer in some reasonably respectable fashion is surely no more radical a thought than the proposition that they should be able to read and write," says Stephen White, director of special projects for the Alfred P. Sloan Foundation.

Among the signs of the computer's growing role in the curriculum:

▶ The Rochester Institute of Technology has adopted a set of goals for computer literacy for both students and faculty members, including a requirement that any student receiving a degree, regardless of field of study, must demonstrate "fundamental computer literacy." To help implement the policy, R.I.T. plans to invest $4.2-million in new computing equipment.

▶ Computer literacy will be a graduation requirement for all students at Hamline University, starting with freshmen entering next fall and transfer students entering in the fall of 1983.

▶ Dartmouth College, where 93 per cent of the students already have used computers without being required to do so, plans to start selling and renting computers to students next fall.

▶ Wells College, after offering a two-week-long course to faculty members with no previous computer experience, finds instructors in French and philosophy writing

Continued on Page 8, Column 1

Arnold Shilepsky, left, is director of Wells College's computer-literacy program.

Enrollment Up in Universities' Home-Study Courses

By BEVERLY T. WATKINS

CINCINNATI

The number of students taking correspondence courses offered by universities is increasing at a rate of 10 to 15 per cent a year, according to the administrators who oversee the programs.

"Right now, correspondence study is the cheeriest high point in continuing education," says Milton R. Stern, dean of university extension at the University of California at Berkeley.

Many administrators are predicting a bright future for their correspondence courses—partly, they note with some irony, because the general economy is expected to remain sluggish.

"History has shown that with a downturn in the economy comes an upturn in enrollments. Today, more adults are returning to education, and they are looking for ways to get the most for their money," David F. Mercer, director of independent study at Pennsylvania State University, told a conference of the National University Continuing Education Association here.

With the fees for correspondence programs sometimes half those of campus instruction, "independent study is a bargain-basement way of getting a college education," he said.

Richard W. Moffitt, director of independent study at Ohio University, said the flexibility of correspondence courses would make them even more popular. He predicted that "our enrollments will continue to increase because more people who want education are working, and they find it more and more difficult to free structured time for higher education."

At the same time, Mr. Moffitt acknowl-

Continued on Page 4, Column 1

MARGINALIA

It was Widdershins College [writes Haverford College's John F. Gummere] that finally blew the whistle on Euphoria U., notorious for its high-powered recruiting methods.

It came about because of the competition for one Alva Descartes. Even in the ninth grade, Alva was spotted by the scouts of Widdershins as a standout, a prize for any college.

By December of his senior year, Alva had been courted by representatives of 70 colleges. Scouts infested his home. He had been offered the standard benefits that go to any star athlete: free board and lodging (tax-exempt) for four years, free tuition, a weekly stipend, promises of first-class remuneration for summer work with an important company (with which he would eventually find a job). He had been entertained on campuses, shown the splendid facilities, interviewed by top officials.

But Alva was not sought for the ordinary, routine contract as an athletic employee. He was far more important. He had scored 800 in every C.E.E.B. examination, was going to take the A.P. exams in mathematics, biology, chemistry, and Latin (which he enjoyed as a humanistic subject). His presence at a college would provide the finest of public-relations releases; he would at once have opportunities to pursue whatever special field of research he chose. He could be an invaluable assistant to a professor engaged in work that would bring big grants from foundations or industry.

Not much fuss was made over certain benefits that routinely are given to star athletes: the apartment, the automobile, the "generous" assistance with other expenses. People had been winking at all that for years and years.

What blew the whistle were the "outrageous benefits" that Euphoria added. Finding that he was interested in the Fibonacci series, they arranged for his private phone number to be 358-1321 and his automobile license, FIB 618. To top it all, he was to have his own computer terminal in his apartment.

Spies discovered (and here was the basis of the case) that he had been brought to the Euphoria campus two times more than the recruiting rules allowed: once for a lecture on "Cauchy's Theorem and Residue Calculations," and once for a talk on "Molecular Cloning of Genes."

President Fourier of Widdershins, in a series of appeals, put the whole thing before the A.A.U.P., praying relief from such practices.

•

From last month's issue of *Emphasis*, a newsletter from the University of Illinois at Urbana-Champaign:

"There are three (3) ways that the rhetoric requirement may be met prior to freshman registration: . . .

"If the above information [does not] anser your questions or if you have questions pertaining to entering freshman . . . please contact . . ."

•

"Newswriters have there own vocabulary . . . ," began a column in *Editor & Publisher* devoted to cleaning up one's journalese. We didn't bother to read on. —C.G.

In Brief

Financial Crisis Declared at Northern Michigan U.

The Board of Control of Northern Michigan University has declared a financial emergency and has authorized the university's administration to negotiate salary freezes and reductions, layoffs, and other cost-cutting measures with several campus unions, including the American Association of University Professors.

Twenty administrators have notified President John X. Jamrich that they will forgo salary increases for 1982-83 and take days off without pay to help achieve a budget reduction of from $2.7-million to $3.5-million.

The new cuts follow a $5.5-million reduction in the university's budget accomplished last year through attrition and job consolidations.

Mass. Court Upholds Smith's Tax Exemption

The Massachusetts Supreme Judicial Court has ruled that Smith College is entitled to a property-tax exemption despite its women-only admissions policy.

Lawyers for the rural farming town of Whately, where Smith owns some 200 acres of land, argued that because Massachusetts had added an equal-rights amendment to its constitution in 1976, the college should lose its tax-exempt status. The court avoided the issue of whether a tax exemption could be considered a form of public support. Instead, it ruled that constitutional challenges are the responsibility of the state attorney general or revenue commissioner rather than a local community.

The court's ruling upheld a decision by the state's Appellate Tax Board in the two-year-old dispute. Smith operates an observatory in Whately.

Harvard Fund Honors Slain CIA Agent

A $50,000 fund has been established at Harvard University's John F. Kennedy School of Government in memory of a Harvard alumnus, Richard S. Welch, the Central Intelligence Agency agent who was slain in Athens in 1975. The money, raised through private donations, will be used to purchase case studies on problems of military intelligence, according to Bailey F. Mason, associate dean for resources at the Kennedy school.

Both university and C.I.A. spokesmen say the fund has no ties to the agency.

1,000 Mice 'Freed' at U. of Pennsylvania

More than 1,000 mice were released from their cages at a research laboratory at the University of Pennsylvania's medical school this month.

The mice were discovered in the lab by a caretaker. Campus officials suspect someone deliberately opened the lids of the cages, a university spokesman said. The incident, being investigated by campus police, is "unheard of, and extremely upsetting," said James Ferguson, associate dean at the medical school.

About 700 of the animals were being used by Alicia Dustira, a post-doctoral medical student working on an immunology project. She had to kill 546 of the mice because there was no way to distinguish the control group from the noncontrol group. The rest of her mice, as well as those from other experiments, had identifying marks and were spared.

Arizona Dean Quits over 'Supercollege' Plan

The dean of the college of liberal arts at the University of Arizona has resigned amid confusion surrounding the creation of a "super-college" that would include departments now in the colleges of fine arts and liberal arts.

Paul Rosenblatt, who had also been named acting provost of the proposed supercollege, resigned after Henry Koffler, who will become president of the university on July 1, abolished the position of provost. Mr. Koffler, who is now chancellor of the University of Massachusetts at Amherst, felt the provost's position would add an unnecessary level of bureaucracy, a university spokesman said.

The supercollege is to include faculties in the humanities, the sciences, the fine arts, and the social and behavioral sciences. Plans for it have provoked debate on the campus, the spokesman said.

Mr. Rosenblatt said he would return to teaching in the English department, where he is a professor.

Instructor Fatally Wounded at College Office

Dudley Yasuda, an instructor in psychology at San Francisco City College, was fatally wounded by an assailant who entered Mr. Yasuda's office at the college while he was conducting a seminar there with eight students.

Mr. Yasuda died at a nearby hospital about an hour after the shooting. No one else was hurt. José Luis Partida, 28, a mental patient and former student of Mr. Yasuda's, was later arrested on suspicion of murder.

Mr. Yasuda had been warned by a psychiatrist that a former student might try to harm him.

D.C. Faculty Sues to Halt Appointment of President

The Faculty Senate at the University of the District of Columbia has sued to prevent the appointment of Benjamin H. Alexander to be the university's new president.

In a suit filed last week in the Superior Court of the District of Columbia, the faculty group says the procedure by which trustees chose Mr. Alexander was "arbitrary, capricious, and unlawful." It alleges, among other things, that the meeting at which he was picked was closed to the public, and that the board did not meet him before offering him the job.

Mr. Alexander has said he will accept the job.

Michael Terry, a lawyer for the university, said last week that he had not yet received a copy of the Faculty Senate's complaint.

Cal. Union Sues to Bar Transfer of Pension Funds

A faculty union in the California State University system has sued to prevent the state from using funds from the Public Employee Retirement System to help avert a deficit in the state budget this fiscal year.

Gov. Edmund G. Brown, Jr., and the state legislature recently agreed to withhold $180-million in state contributions to the retirement system as one of several budget-balancing steps.

The plan to use retirement contributions is a "short-term cover-up of the state's long-term fiscal problems," said Stewart Long, president of the United Professors of California, an affiliate of the American Federation of Teachers (A.F.L.-C.I.O.).

### Duluth Union Sues Minnesota Regents

The faculty union at the Duluth campus of the University of Minnesota has charged the university's board of regents with unfair labor practices in a suit filed in state district court. The union, which took the action after the regents refused to meet with its representatives, has asked the court to require the regents to negotiate a contract.

The union, an affiliate of the National Education Association, was elected as the collective-bargaining representative by the Duluth faculty in 1980. The negotiations would be for the first contract.

Microelectronic Companies to Support Universities

About 30 U.S. semiconductor companies have pledged $6-million this year and from $10-million to $15-million in 1983 to support university research in microelectronics.

Thomas Hinkelman, executive director of the California-based Semiconductor Industry Association, said grants to universities would be awarded later this year by the Semiconductor Research Cooperative, a nonprofit subsidiary of the association that is managing the research fund.

He said the objectives of the effort would be to supplement existing microelectronics-research programs at universities, encourage universities not engaged in microelectronics research to start such work, and increase the number of graduate students in the field.

Kansas Boosts Salaries in Engineering, Business

The Kansas legislature will spend $900,000 next year to increase the salaries of faculty members in engineering, computer sciences, and business at the state's public colleges and universities.

The appropriation, approved this month, was designed to decrease the shortage of faculty members in those fields, said John Conard, executive officer of the university system's board of regents. Without additional funds, he said, many faculty members would leave the university system to take higher-paying positions.

He said the money would be in addition to funds provided by the state for increases in faculty salaries in all fields.

Study Urges $16-Million in Tuition Aid for CUNY

A private study group has recommended that New York City appropriate $16-million to eliminate tuition at the City University of New York, where none was charged before 1976.

The Committee for Public Higher Education estimated that $16-million would be enough to pay all tuition charges that are not otherwise covered by tuition-related state and federal aid.

The additional cost would be relatively small, the committee said, because over 90 per cent of all full-time students at C.U.N.Y.

Private Gifts to Education Hit $7.5-Billion in 1981

NEW YORK

Philanthropic support of education reached nearly $7.5-billion in 1981, up 12.1 per cent from the 1980 total, according to preliminary data from the American Association of Fund-Raising Counsel.

That was in line with an estimated increase of 12.3 per cent for all philanthropic purposes, the association said. Gifts to education amounted to 14 per cent of the $53.6-billion estimated total giving.

The 12-per-cent increase in giving in 1981 exceeded the rate of inflation as measured by the government's Consumer Price Index, which went up 8.9 per cent during the same period.

Contributions to education exceeded giving to hospitals and other health agencies in 1981 for the fourth consecutive year.

By far the largest share of charitable giving went, as in previous years, to religious institutions. They received 46 per cent of all gifts in 1981.

The largest share of contributions came from individuals, who provided 83 per cent of the total.

Estimated Charitable Giving, 1980 and 1981

	1980	1981	Change	Share of total in 1981
	(In billions of dollars)			
From:				
Individuals	$39.78	$44.51	+11.9%	83.0%
Bequests	2.86	3.49	+21.7%	6.5%
Corporations	2.70	3.00	+11.1%	5.6%
Foundations	2.40	2.62	+ 9.1%	4.9%
To:				
Religious groups	$22.15	$24.85	+12.2%	46.3%
Education	6.68	7.49	+12.1%	14.0%
Health agencies	6.49	7.36	+13.4%	13.8%
Social services	4.73	5.32	+12.4%	9.9%
Arts and humanities	2.96	3.35	+13.1%	6.2%
Civic groups	1.36	1.54	+13.2%	2.9%
Other	3.37	3.71	+10.0%	6.9%
Total	$47.74	$53.62	+12.3%	100.0%

SOURCE: PRELIMINARY DATA FROM AMERICAN ASSOCIATION OF FUND-RAISING COUNSEL

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News Summary

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Historians are beginning to see the advantages of putting their scholarship on film. Story on Page 4.

The University of Tennessee at Knoxville is gearing up for the arrival of a noisy neighbor—the 1982 World's Fair. Story on Page 9.

College endowments earned an average return of 14.6 per cent last year, substantially exceeding the rate of inflation. Story on Page 2.

A second researcher at Yale University has refused to submit a controversial report, required by the government, documenting the costs of federally sponsored research. Story on Page 8.

Colleges with a poor record of collecting loans from former students would get less money next year under the government's proposed plan for allocating direct-loan funds. Story on Page 11.

A Senate committee is expected to endorse President Reagan's proposal to cut most of the National Science Foundation's funds for science education. Story on Page 11.

Congress has taken no action on an Administration request to rescind federal funds for education earmarked for spending in academic year 1982-83. Story on Page 11.

Gallaudet College Press, the publisher of widely respected children's books and curriculum material for the deaf, would like to be known as a scholarly press. Story on Page 17.

South Africa has banned two student journalists, along with the newspaper they edited, for their opposition to the government's policy of apartheid. Story on Page 15.

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WIDE WORLD

William T. Coleman, Jr.

Court to Weigh Exemptions for Colleges that Show Bias

Justices agree to rule in case involving Bob Jones U.

By CHERYL M. FIELDS

WASHINGTON

The Supreme Court has agreed to decide whether private schools and colleges with racially discriminatory policies can receive tax exemptions.

In announcing that it will hear cases filed by Bob Jones University and Goldsboro Christian Schools, the Court set no date for arguments during its current term, which ends in early July. This means arguments won't be scheduled until the Court begins a new term in October.

At the request of both civil-rights groups and the Justice Department, the Court named a special advocate to argue the federal government's original position in the case—that the Internal Revenue Service is barred by the Constitution and federal laws from granting tax exemptions to discriminatory schools and colleges.

The Court asked William T. Coleman, Jr., Secretary of Transportation in the Ford Administration and chairman of the N.A.A.C.P. Legal Defense and Educational Fund, to act as special advocate.

The Reagan Administration abandoned its original position in January, when it announced that it no longer believed the I.R.S. had adequate statutory authority to deny the tax exemptions.

The Justice Department, however, does not support the contentions of Bob Jones University and the Goldsboro schools that the government must grant the exemptions

Continued on Page 13, Column 1

Colleges Gobble Up Millions of Quarters from Pac-Man and Other Video Games

By JACK MAGARRELL

Pac-Man, a video-game character who gobbles up quarters, has been recruited by colleges and universities to help their finances in a period when every 25 cents helps.

In student unions and residence halls, students are willingly contributing millions of quarters to the college of their choice through the coin slots of Pac-Man and other video games.

"Student unions are under pressure to find new sources of revenue, and this is a very obvious way to do it," said Richard D. Blackburn, executive director of the Association of College Unions–International.

Video games have been replacing the pinball machines of an earlier student generation in recreation areas of many campuses—because they are more popular and earn more money.

The video-game fashion may not last longer than other campus fads, Mr. Blackburn said, but "right now it's very popular."

"There's every indication that it's being used more and more as a dependable source of revenue," he said.

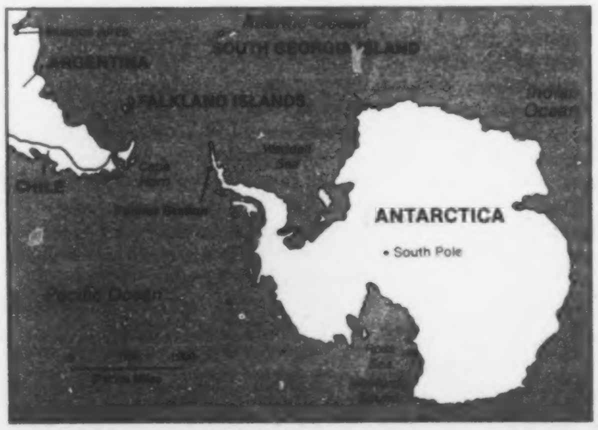
No other space in student unions generates as much revenue as

Continued on Page 6, Column 1

CHRONICLE PHOTOGRAPH BY JOHN C. PHILLIPS

Video games are replacing pinball machines on many campuses. Above, students at George Washington U.

Antarctic Studies Threatened by Falklands Conflict



By DAVID WALKER

LONDON

The conflict between Britain and Argentina over the Falkland Islands has stirred fears here that international cooperation among scientists in exploring and studying Antarctica may be threatened.

The British Antarctic Survey, based at Cambridge University, has maintained stations in Port Stanley in the Falkland Islands, and on South Georgia Island, some 800 miles to the east, as communication and supply centers for bases in Antarctica itself.

In taking over the Falklands—which they call the Malvinas—the Argentines also occupied South Georgia.

Richard Laws, director of the survey, said the 26 British scientist [illegible]d technicians at the station on South Georgia probably would be evacuated. He said work at the base in Port Stanley had come to a halt.

He added that the invasion had taken place too late in the South-

Continued on Page 16, Column 3

FACT-FILE

Engineers and Scientists at Colleges

Full-time employees, January, 1976-January, 1981

	Men				Women			
	1976	1980	1981	Per cent change, 1980-81	1976	1980	1981	Per cent change, 1980-81
Engineers	**22,475**	**25,765**	**26,190**	**+ 1.6%**	**449**	**713**	**802**	**+12.5%**
Aeronautical and astronautical engineers	936	1,117	1,036	– 7.3%	30	27	22	–18.5%
Chemical engineers	1,601	1,827	1,833	+ 0.3%	37	59	68	+15.3%
Civil engineers	3,932	4,208	4,295	+ 2.1%	83	118	133	+12.7%
Electrical engineers	5,331	6,260	6,378	+ 1.9%	74	114	124	+ 8.8%
Mechanical engineers	4,301	4,728	4,820	+ 1.9%	45	92	111	+20.7%
Other	6,374	7,625	7,828	+ 2.7%	180	303	344	+13.5%
Physical scientists	**24,976**	**25,507**	**25,560**	**+ 0.2%**	**2,104**	**2,487**	**2,613**	**+ 5.1%**
Astronomers	—	748	818	+ 9.4%	—	68	79	+16.2%
Chemists	12,634	12,553	12,867	+ 2.5%	1,509	1,775	1,888	+ 6.4%
Physicists	10,428	10,834	10,524	– 2.9%	394	492	490	– 0.4%
Other	1,914	1,372	1,351	– 1.5%	201	152	156	+ 2.6%
Environmental scientists	**6,867**	**7,676**	**7,809**	**+ 1.7%**	**390**	**660**	**742**	**+12.4%**
Atmospheric scientists	568	749	713	– 4.8%	33	44	50	+13.6%
Earth scientists	5,240	5,158	5,209	+ 1.0%	287	398	423	+ 6.3%
Oceanographers	1,059	1,259	1,304	+ 3.6%	70	127	161	+26.8%
Other	—	510	583	+14.3%	—	91	108	+18.7%
Mathematical and computer scientists	**20,021**	**21,946**	**22,668**	**+ 3.3%**	**3,104**	**4,090**	**4,423**	**+ 8.1%**
Mathematicians	16,370	16,741	16,914	+ 1.0%	2,622	3,181	3,310	+ 4.1%
Computer scientists	3,651	5,205	5,754	+10.5%	482	909	1,113	+22.4%
Life scientists	**73,580**	**84,049**	**84,504**	**+ 0.5%**	**18,289**	**24,065**	**25,555**	**+ 6.2%**
Agricultural scientists	11,777	13,107	13,009	– 0.7%	1,165	1,325	1,345	+ 1.5%
Biological scientists	27,870	30,506	31,186	+ 2.2%	7,029	8,219	8,680	+ 5.6%
Medical scientists	33,933	38,599	38,308	– 0.8%	10,095	11,717	12,399	+ 5.8%
Other	—	1,837	2,001	+ 8.9%	—	2,804	3,131	+11.7%
Psychologists	**12,813**	**12,429**	**12,428**	**0.0%**	**3,989**	**4,322**	**4,392**	**+ 1.6%**
Social scientists	**33,568**	**33,325**	**33,351**	**+ 0.1%**	**7,187**	**7,827**	**7,812**	**– 0.2%**
Economists	9,436	9,990	10,075	+ 0.9%	933	1,111	1,126	+ 1.4%
Political scientists	8,036	7,653	7,825	+ 2.2%	1,029	1,115	1,167	+ 4.7%
Sociologists	8,501	7,919	7,768	– 1.9%	2,926	2,938	2,938	0.0%
Other	7,595	7,763	7,683	– 1.0%	2,299	2,663	2,581	– 3.1%
Total	**194,300**	**210,697**	**212,510**	**+ 0.9%**	**35,512**	**44,164**	**46,339**	**+ 4.9%**

— Data not available

SOURCE: NATIONAL SCIENCE FOUNDATION

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Merger of 2 Private Universities Urged by Panel in Connecticut

BRIDGEPORT, CONN.

Two private universities—the University of Bridgeport and the University of New Haven—should be consolidated "as quickly as possible" into a new institution to serve southern Connecticut, according to a commission that has been studying a possible merger for the last six months.

The new institution, which might be called the University of Southern New England, should be "a fully integrated" university offering undergraduate and graduate "career-oriented" programs based on the liberal arts and sciences, according to the report of the 10-member commission of academic and business leaders. It should also conduct basic and applied research, the commission said.

The commission, which was headed by Louis T. Benezet, research professor of human development and educational policy at the State University of New York at Stony Brook, proposed that the two universities establish a holding company, with trustees from both institutions and the community to arrange the merger. The holding company would make decisions about the specific form of the merger and select personnel to carry it out.

The study of the feasibility of consolidating the two universities was undertaken last November at the request of their presidents, who said at the time that they thought a merger could produce a stronger institution that could offer better academic programs and services to the region. A combined institution would have about 900 faculty members and 15,000 students.

The study included interviews with administrators and faculty members on both campuses and with members of the Bridgeport and New Haven communities. It also included an assessment of the facilities on the two campuses, which are located about 20 miles apart.

The feasibility study was financed by $125,000 from the Fxxon Education and Ford Foundations, which have indicated an interest in the merger as a model.

The two universities have agreed that their procedures can be made public through meetings and a merger manual.

The boards of trustees of the two universities have not indicated when they will make a decision about the merger. —BEVERLY T. WATKINS

N.J. Approves Private-Public Merger

TRENTON, N.J.

The New Jersey Board of Higher Education has approved the merger of a private two-year liberal-arts college and a public vocational-technical school to form a new institution called Union County College.

The merger, which would consolidate Union College in Cranford and Union County Technical Institute in Scotch Plains, requires approval by the state legislature. Legislators and the governor are expected to clear enabling legislation by July 1, according to the board's academic-affairs officer. If the two campuses, which are 10 miles apart, are consolidated, the new institution would have about 6,000 full-time-equivalent students and 240 faculty members.

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Opinion

TIAA-CREF's 'Overriding Objective': Protecting Future Income Security

By William T. Slater

IN THE OPINION COLUMN of *The Chronicle*'s April 7 issue, Prof. I. H. Otto ["TIAA-CREF Investments: 'Amateurish' and 'Pitiful' "] took strong issue with both the investment strategies and 1980 investment results of Teachers Insurance and Annuity Association and College Retirement Equities Fund, as reported in the 1980 T.I.A.A.-C.R.E.F. annual report. Before responding directly to Dr. Otto's criticisms, let me first emphasize the one point on which we seem to be in complete agreement.

For most of the "hundreds of thousands of T.I.A.A.-C.R.E.F. participants," their individually owned annuity contracts are likely to be, along with Social Security, the principal source of income security in retirement for themselves and their spouses. This clearly suggests, as does Professor Otto, that participants should keep themselves as fully informed as possible, reviewing not only T.I.A.A.-C.R.E.F.'s annual reports, but also the personalized yearly Blue and Yellow Slip reports, the variety of special-subject booklets available on request, and our occasional participant newsletters.

These publications and reports include investment results, benefit illustrations, tax and regulatory information, and periodic reminders about the importance of updating beneficiary designations. They also describe choices and options available in T.I.A.A. and C.R.E.F. annuity contracts that can be useful in planning for retirement, and they promote and encourage such personal planning.

The T.I.A.A.-C.R.E.F. annual report for 1981, en route to participants at this writing, contains much of this type of information. . . .

Consideration of an organization's purpose and objectives, whether managing trusts, mutual funds, endowments, or pension funds, is essential to evaluating its investment strategies and investment returns. T.I.A.A. and C.R.E.F. manage fully vested and funded pension plans, with the overriding objective of protecting the future income security of participants in their old age. Both companies seek to earn rates of return for participants as high as possible within prudent risk parameters. And because the accumulation and payout of lifetime annuity benefits provided by these pension plans cover such long periods, both T.I.A.A. and C.R.E.F. pursue long-term investment policies and strategies.

T.I.A.A. invests the retirement funds entrusted to it primarily in commercial mortgages and direct loans to business and industry, increasingly with the inflation-adapted features described in the current annual report. Its investments are principally long term because yields on long-term-debt investments traditionally have been higher than those available on very short-term securities.

The following table shows representative average interest rates prevailing during each of the last 30 consecutive years. For the long-term rates, Baa corporate bonds provide a reasonable proxy for the risk/return levels of T.I.A.A.'s direct loans and publicly traded bonds, while three-month commercial paper is representative of investments currently available in the money market.

Year	Short-term rate †	Long-term rate ‡
1952	2.20%	3.51%
1953	2.42	3.73
1954	1.46	3.51
1955	2.04	3.53
1956	3.14	3.88
1957	3.65	4.71
1958	2.18	4.73
1959	3.88	5.05
1960	3.55	5.19
1961	2.72	5.08
1962	3.20	5.02
1963	3.52	4.86
1964	3.98	4.83
1965	4.38	4.87
1966	5.67	5.67
1967	5.25	6.23
1968	6.09	6.94
1969	8.03	7.81
1970	8.16	9.11
1971	5.26	8.56
1972	4.75	8.16
1973	8.40	8.24
1974	10.47	9.50
1975	6.61	10.61
1976	5.43	9.75
1977	5.60	8.97
1978	7.99	9.49
1979	11.17	10.69
1980	12.95	13.67
1981	15.97	16.04
1982 *	13.73	17.03

† Three-month commercial paper, 1963-1982 (data not available for prior years). Three-month finance company paper, 1952-1962. Converted to bond-equivalent basis. The source for these data is Salomon Brothers.

‡ Moody's Baa corporate bonds. The source for these data is the Federal Reserve.

* Data for the first three months.

As the table shows, average yields on short-term commercial paper have been higher than those on long-term corporate bonds in only 4 of the last 30 years. The same relationship—yields on longs higher than shorts—holds true in comparisons of long-term government bonds versus short-term Treasury bills, though yields for both types of government issue have been uniformly lower than the yields shown in the table.

Professor Otto's major criticism of T.I.A.A.'s investment program is that it does not include aggressive use of short-term securities. He suggests, we believe incorrectly, that there would be "no risk in moving into short-term investments, when short rates are higher than long rates," and then switching "from short-term to long-term investments the moment short-term rates move below long-term rates."

Actually, two risks or opportunity costs would be involved in following such a strategy. If when short-term rates fell below long-term rates the rates then obtainable on long-term investments had also fallen, the investor shifting his short-term funds to long would have lost the opportunity of locking into long-term rates at their previous, higher levels; would have made the "wrong call" referred to in our annual report. An examination of day-to-day yield spreads during the 1979-81 period of extreme short-term-rate volatility suggests the execution problems that would be involved in following such a strategy as well as the potential for either gains or losses that can occur in periods of similar volatility.

The other, more serious risk of lost opportunity involved in pursuing Professor Otto's "short to long" approach would result from having to move very large sums accumulated in short-term paper into long-term-investment markets at "the moment" of crossover in rates.

Negotiating direct loans of the size and quality sought by T.I.A.A. frequently takes several months. The result is well worth the effort for participants, however, since yields on T.I.A.A.'s directly placed loans normally exceed yields on publicly traded bonds of similar quality, and now range 150 to 350 basis points above prevailing yields on long-term government bonds.

Given the substantial size of any T.I.A.A. short-term pool that would have to be liquidated at the moment of rate crossover, T.I.A.A.'s investment staff would have little choice but to invest in long-term government securities, thereby forgoing the higher returns on direct loans.

The market for publicly traded corporate bonds would not be an alternative route for much of the shift because its trading volume is not large enough to absorb sudden inflows of hundreds of millions of dollars without seriously affecting market prices, especially since traders would be well aware, in advance, of the automatic nature of the strategy triggering such an influx. And Professor Otto's timing requirements would prevent further investment by T.I.A.A. in commercial mortgages and the inflation-adapted features they offer. Mortgages on office buildings and shopping centers typical of those in T.I.A.A.'s portfolio, as well as real-estate purchases, require even longer lead times than direct loans.

AS REPORTED at some length in the current annual report, substantial changes have been occurring in the types of loan being made by T.I.A.A. during the last few years. Rather than moving into short-term paper, T.I.A.A. has been taking a position between extremes—through loans that provide an opportunity for participants' funds to share in future earnings of corporate borrowers through contingent income features or through options permitting the future purchase by T.I.A.A. of the borrowers' common stock at a predetermined price; by making loans for shorter time periods than in the past; by including provisions to reset interest rates during the term of the loan; by purchasing real estate; and by continuing to make some longer-term fixed-rate loans in order to benefit from the real rates of return they will produce if inflation continues to decline. And, of course, T.I.A.A. will continue to keep options open for future investments and strategies that seem appropriate and prudent for these assets on which so many

Continued on Following Page

Opinion

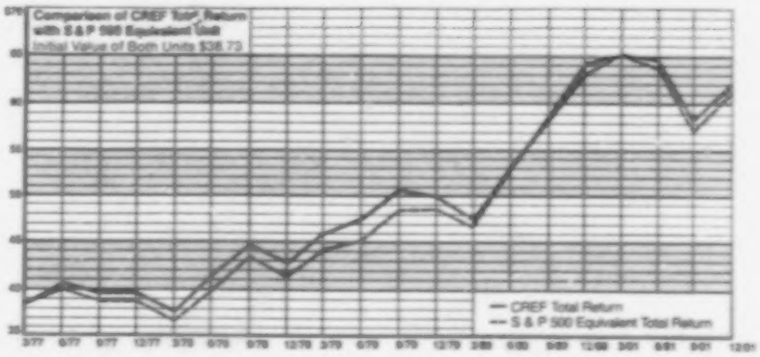
Continued from Preceding Page

people rely for their own and their families' long-range financial security.

Meanwhile, the 14-per-cent effective annual rate of interest currently credited on T.I.A.A. annuity premiums being received compares favorably with other lifetime-annuity products available today.

Turning to the common-stock component of the T.I.A.A.-C.R.E.F. retirement system, C.R.E.F. also takes a long-term approach to investing the funds that participants allocate to it. Just as T.I.A.A. doesn't bet one way or the other on the future course of interest rates, C.R.E.F. doesn't specialize in any particular segment of the market, or bet on market timing, or seek spectacular performance at the risk of heavy losses. Rather, in offering a cross-sectional share of participation in the stock market as a whole, C.R.E.F.'s funds are invested with the objective of obtaining returns that are about the same from year to year as those of the stock market in general, and somewhat better over the long term.

Continuing to refer to the 1980 annual report, Professor Otto noted that for calendar 1980 C.R.E.F.'s investment results were surpassed by the broad market indexes. As that report pointed out, however, "the investment results of C.R.E.F., like those of other widely diversified equity funds, largely reflect the returns on common stocks in general. But when measured a year at a time, C.R.E.F.'s total return will differ from the broad market averages—less in one year and more in another."



For calendar year 1981, a year of broad decline in common-stock prices, the total return for Standard & Poor's 500 once again differed from C.R.E.F.'s, this time in participants' favor: S.&P.'s total return was minus 4.91 per cent; C.R.E.F.'s total return (after expenses) was minus 1.46 per cent.

Professor Otto then observed that a graph in the 1980 report indicated that C.R.E.F.'s relative performance, as measured against the S.&P. 500, was "deteriorating." As those familiar with the end-point sensitivity of performance comparisons know, average results are heavily influenced by experience at both ends of the periods being compared. C.R.E.F. did underperform the S.&P. 500 in 1980, and the resulting graph apparently gave Professor Otto a sense of "deterioration." But updating the 1980 graph through calendar year 1981 produces the lines shown in the chart above, which appears in the current annual report. Given the new ending point, C.R.E.F.'s 10.4-per-cent compound annual average net rate of total return over five instead of four years was somewhat better than the 10.1-per-cent compound annual rate for the S.&P. 500 Equivalent (the S.&P. 500 results less the costs that would be incurred if it were an operating fund).

And, finally, Professor Otto referred to the continuing litigation involving the issue of "unisex" mortality tables. . . . The litigation primarily concerns the use of mortality tables in pension and tax-deferred-annuity plans.

Professor Otto observed that "to use a unisex annuity table without using a unisex mortality table [for life insurance] is an act of moral bankruptcy." What he had missed in both the 1979 T.I.A.A.-C.R.E.F. annual report and the March, 1980, participant newsletter was the statement that if T.I.A.A.-C.R.E.F. were required to adopt unisex mortality tables for individually owned annuity contracts, then unisex mortality tables would also be adopted for future issues of T.I.A.A. individual life-insurance policies. . . .

The trustees and management of T.I.A.A.-C.R.E.F. are well aware of the fiduciary responsibility they bear as stewards of the billions of dollars in pension funds underlying the retirement security of participants—those now retired and those who will be retiring. . . . And this awareness is nowhere more evident than in the investment strategies taken to enhance and safeguard these funds over the long time horizons inherent in fully vested, fully funded pension plans.

William T. Slater is senior vice-president of T.I.A.A.-C.R.E.F.

Letters to the Editor

'Extreme Conservatism in Investments Is Not Prudence'

TO THE EDITOR:

Professor Otto has performed a great service to T.I.A.A.-C.R.E.F.-contract holders in his essay criticizing T.I.A.A.-C.R.E.F. for its relatively poor investment performance. I hope it stimulates contract owners not only to look at what's happening to their future prospects but also to do something about it.

Fortunately there is a way to put some pressure on the T.I.A.A.-C.R.E.F. managers, albeit a cumbersome and time-consuming one. T.I.A.A.-C.R.E.F. trustees are elected by the contract holders, and those trustees have a fiduciary responsibility to those electors to see that their money is managed as a prudent person would do.

Extreme conservatism in investment management is not prudence, as Professor Otto so clearly points out. Contract holders in concert could bring great pressure on the trustees and through them might cause some changes for the better. Another fortunate circumstance is that T.I.A.A.-C.R.E.F. is in New York, and the regulatory authorities there are strict, indeed. Contract holders would probably have the assistance of the New York State Insurance Department in procedural matters and, perhaps, help on matters of substance.

Professor Otto has issued the first call for efforts to better the future of the hundreds of thousands who have put their faith and their fortune in T.I.A.A.-C.R.E.F.'s hands. Now it's up to the rest of us.

LYLE E. COOK
Executive Director
That Man May See Inc.
A Foundation for Clinical Eye Research
San Francisco

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TO THE EDITOR:

I. H. Otto's article was right on the money about T.I.A.A.-C.R.E.F.'s amateurish and pitiful performance.

What Professor Otto did not explain is that T.I.A.A.-C.R.E.F. also does not allow for transferability and accessibility of one's money. The final and cruelest blow is that T.I.A.A.-C.R.E.F.'s annuity rates are among the lowest in the nation and they are not even in the top 100 of all insurance companies.

Faculty members and administrators should heed Professor Otto's advice that they explore alternatives to T.I.A.A.-C.R.E.F. that offer superior performance, flexibility in switching investments, accessibility to funds during times of financial need, and, lastly, much higher annuity rates at retirement. . . .

JAMES F. COSTELLO
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Tax-Sheltered Investments
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TO THE EDITOR:

Professor I. H. Otto's article on T.I.A.A.-C.R.E.F. investments hits the nail on the head. T.I.A.A.-C.R.E.F. has performed miserably and the leaders of that organization know it. Twice in the past several months I have written to the president of T.I.A.A.-C.R.E.F. asking why C.R.E.F. doesn't create an index fund or else put its money into an existing index fund. I have yet to receive an answer. The solution: Let's nominate and elect trustees who will throw out the current incompetent staff and replace them with individuals who know something about investments.

JOEL MARGOLIS
Albany, N.Y.

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TO THE EDITOR:

T.I.A.A.-C.R.E.F. has been in the T.D.A. business a long time, and articles such as those in your April 7 issue may cause us some concern. The professor who is suing for a lump-sum payment (In Brief, April 7) apparently wants to roll over his account into an I.R.A. It is understandable why he might like to do this, because many companies permit roll-overs and there is no question these are valuable options to have in financial planning.

Whether or not you agree with Professor Otto's opinion of T.I.A.A.-C.R.E.F.'s investment performance, his analysis gives you an even stronger feeling that it's not a good thing to be "locked in," regardless of what company is holding your retirement account.

For many of us, I think it would be premature to allow these reports to shake our confidence in a company that has such a long history of serving people's investment and retirement needs. I predict it is only a matter of time before T.I.A.A.-C.R.E.F. will follow the path of their competition by providing equal or even more attractive withdrawal privileges.

RICHARD B. MCCARTY
Director of Development
and Alumni Affairs
York College of Pennsylvania
York, Pa.

•

TO THE EDITOR:

It is high time T.I.A.A.-C.R.E.F. has the spotlight turned on it. Run by a docile and ineffective board of trustees. . . . a highly paid staff supported by a bloated bureaucracy, it tries to conceal its inexcusable performance.

Back in 1979 I tried to obtain the cost base and the market value of its holdings only to be told that such information would be meaningless and I could not have it. That year one of their major investments was in motor vehicles, equipment, and tires. A more stupid investment would be difficult to imagine. However, I was assured that C.R.E.F. uses academic research and advanced quantitative techniques, and that I should let their all-wise investment staff handle matters. I got no basic data that I sought.

T.I.A.A.-C.R.E.F. is secretive, paternalistic, and dismal in performance. The staff from the top down struggles to maintain their high-paid positions by revealing as little as they can get by with. With some competition we might get better results. After all, this group is playing with billions of our dollars and doing a pitiful job at it. We on the pension end lose; the staff prospers.

JOHN M. STALNAKER
Sarasota, Fla.

No magic potion for statewide coordination

TO THE EDITOR:

The cauldron on statewide coordination continues to boil. Peggy Gordon Elliott lit the fire with a Point of View ("Are Coordinating Boards Needed Anymore?" January 13). I added a bit of spice (Letters, February 17), claiming that voluntary coordination does not work. Lewis D. Patterson, executive director of the Council for Interinstitutional Leadership, stirred up the brew by pointing (Letters, March 24) to my "unfamiliarity with the steady growth of voluntary cooperative arrangements in American higher education in the past 15 years."

Patterson's distaste for my seasoning stems from sampling the wrong concoction. Both Elliott and I were addressing voluntary cooperation as the states' mechanism for coordinating higher-education institutions. In this context, Elliott sees less need for regulatory boards while I maintain that voluntary effort is simply too weak to protect the public's interest.

Since World War II, statewide regulatory boards for either coordination or governance have been superimposed over various voluntary arrangements in state after state as the dominant mode for state control of public-supported higher education. I know of no state that has abolished its statewide coordinating mechanism in favor of voluntary cooperation, except a few such as Utah, Wisconsin, and North Carolina have consolidated institutions under a statewide governing structure while others such as Michigan and Rhode Island have gone to unified (over all levels of public education) boards.

In any event, the trend has been toward greater control over institutions with increased public accountability.

Patterson must be alluding to the growth of informal, as opposed to statutorily based, structures that result in voluntary consortia and cooperative arrangements in various localities or regions. I heartily endorse such concoctions but cannot visualize them as a magic potion to transform statewide coordination into a voluntary mode.

A. D. BROWNE
Professor of Higher Education
University of Arkansas
Fayetteville, Ark.

U.S. immigration laws and foreign students

TO THE EDITOR:

Marshall Winokur ("Foreign Students' Toughest Test: Getting a Visa," Point of View, March 24) argues that immigration law in this country discriminates against "thousands of capable foreign students" because it is easier for students from Western countries to obtain visas than is the case for students from developing countries.

He also argues that "talented students" should be given the chance to "earn the right to immigrate" as if obtaining an F-1 visa earned them this right.

And he claims that U.S. immigration law discriminates unfairly against this student population, while allowing "destitute Haitians and politically oppressed Cubans" to swell welfare rolls.

We have here a tremendous confusion both of fact and error and of con-

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News Summary

Articles on inside pages

The football program at the University of Southern California is guilty of "flagrant" violations of rules against giving money to athletes, the National Collegiate Athletic Association has found. Story on Page 3.

Ground Zero Week at Boston College was marked by speeches, films, and a disappointing appearance by Billy Graham. Story on Page 5.

The growth of faculty collective bargaining has slowed at public colleges and has stopped entirely at private institutions. Story on Page 6.

Job offers to college seniors are down this year, but average starting salaries are up, the College Placement Council says. Story on Page 4.

Social Security benefits for college students were scheduled to run out last week, and Capitol Hill observers saw little chance of saving them. Story on Page 11.

The number of workers eligible to receive back pay for alleged job discrimination would be limited under new rules proposed by the Labor Department. Story on Page 11.

The Administration claims to be making headway in its war on government regulation. Story on Page 14.

The Buckley Amendment, which guarantees students access to their college records, has proved effective, most administrators agree. Story on Page 15.

Race relations in the United States and South Africa are the subject of a ground-breaking study in comparative history. Story on Page 19.

British scientists have been found safe on South Georgia Island after its recapture from Argentina by the Royal Marines. Story on Page 17.

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Swing from Private to Public Colleges Noted in Applications for Fall

Recession, uncertainty of student aid, and big tuition hikes blamed for shift

By JACK MAGARRELL

A shift away from increasingly expensive private colleges toward relatively low-cost public institutions is indicated by the most recent reports of applications for admission to next fall's freshman classes.

The Chronicle Survey, using a scientific sample of four-year colleges and universities, found the number of freshman applications received through March 31 was down at private institutions and up at public institutions compared with last year.

The outlook for private institutions is worse than it was last year, when the size of freshman classes declined by 2 per cent, according to the National Institute for Independent Colleges and Universities.

Students who in better economic times might have considered only private campuses appear to be applying in larger numbers to prestigious public universities. Some of those universities have reported increases of 10 per cent or more in the number of freshman applications.

Enrollment in community colleges is expected to increase significantly. Many of the two-year institutions will have more applicants than they can afford to admit, according to the American Association of Community and Junior Colleges.

If such indications are borne out by actual enrollment in the fall, it would mean a further increase in the proportion of college students in the public sector, which already enrolls 78 per cent of the total. Last fall, private enrollment rose 1 per cent, to 2,665,594, while public enrollment rose 2.1 per cent, to 9,656,875.

While public institutions in many states face serious financial problems, making it difficult to accommodate enrollment growth, a further shift of students toward the public side could be even more serious for private colleges and universities, which depend on tuition for a larger share of their income than do the public institutions.

Next fall, double-digit increases in tuition rates will be common on private campuses.

Uncertainty about the availability of stu-

Continued on Page 8, Column 1

U.S. Aid Should Go First to Students Likely to Graduate, Bok Suggests

By JANET HOOK

The best way to use limited federal funds for student grants would be to direct them to those who are most likely to graduate from college, according to Derek C. Bok, president of Harvard University.

Although he criticized the student-aid-budget cuts recommended by President Reagan as "highly questionable," Mr. Bok said some of the restrictions proposed by the Administration were justified because of budgetary constraints.

As many college officials and students were still putting pressure on Congress to resist further cutbacks in student-aid programs, Mr. Bok said in his annual report to the Harvard Board of Overseers, "The Administration is on sound ground in seeking to restrict [Pell Grants] to students from low-income families." (Excerpts from Mr. Bok's report appear on Pages 12 and 13.)

$1.3-billion in additional money for student loans is caught in a Congressional logjam. Story on Page 11.

With Guaranteed Student Loans, he added, "the Administration is likewise justified in offering subsidized credit only to students who can actually demonstrate that their college costs exceed their means."

But budget cuts as deep as those sought by the Reagan Administration threaten to "lower the quality of many students' education and to weaken colleges and universities to a degree that could do long-term harm to the public interest," said Mr. Bok, who is also chairman of the board of the American Council on Education.

Devoting his entire annual report to a discussion of federal student-aid policy, Mr. Bok argued that "the federal government must be the ultimate guarantor to se-

Continued on Page 13, Column 2

HARVARD UNIVERSITY

Jefferson Lecturer Emily Townsend Vermeule

Upside-Down Gardening: Notes of a Prehistorian

By ZOË INGALLS

CAMBRIDGE, MASS.

Archaeology is "gardening upside down," says Emily Townsend Vermeule. "You keep the rocks and throw away the dirt."

Mrs. Vermeule, a Radcliffe College professor who will deliver the eleventh annual Jefferson Lecture in the Humanities in Washington this week, has been conducting her style of gardening—on digs in Turkey and Cyprus among other places—over the course of some 30 years.

Oddly enough, she has had little formal training in the field of classical archaeology. Her doctorate, received from Bryn Mawr College in 1956, is in Greek lyric poetry. Nevertheless, she says she prefers to call herself a "prehistorian," whose work deals with "the first 70,000 years of civilization."

Mrs. Vermeule has published widely in the field of ancient Greek history and civilization. *Greece in the Bronze Age*, her best-known book, came out in 1964 and is in its eighth printing. As one reviewer noted, it is the kind of work that usually comes as a fitting

Continued on Page 4, Column 1

A Shift in College Applications for Fall

Continued from Page 1

dent financial aid a year ago was blamed in part for a decline in freshman enrollment at private colleges and universities. That uncertainty is greater this spring, said Virginia Hodgkinson, executive director of the National Institute of Independent Colleges and Universities.

As the economic recession continues, she said, a growing number of students may be postponing their higher education because their parents cannot afford it.

Application rates may also be held down this year by changes in the population.

Although the number of 18-year-olds in the U.S. has been dropping since 1979, this is the first year in which the broader college-age group, 18 through 24, has declined, according to estimates by the Census Bureau.

At the end of March, private colleges and universities had received 2.3 per cent fewer freshman applications than they had at the same time last year, according to the Chronicle Survey. Public institutions reported 1.8 per cent more applications than they had a year earlier.

Looking beyond the overall averages, the Chronicle Survey found that 54.8 per cent of the private institutions had experienced a decrease in applications. By comparison, 40.5 per cent of the public institutions reported a decrease.

The top fourth of the public institutions, in terms of freshman applications, reported increases of 11.8 per cent or more.

By the end of March last year, colleges and universities had received about 90 per cent of their total freshman applications.

The Chronicle Survey does not include community colleges in its sample. The survey was conducted for *The Chronicle of Higher Education* by John Minter Associates, a research organization specializing in higher-education studies.

Some of the trends indicated by the Chronicle Survey were confirmed by a survey of 40 major public universities by the Associated Chief Admissions Officers of Public Universities. It found freshman applications at mid-March were up 2.6 per cent over the same time a year earlier.

"It seems clear that there is some swing from private to public institutions," said Donald G. Dickason, dean of admissions at Pennsylvania State University and chairman of the organization of public-university admissions officers.

The changes in application rates at the public universities varied widely, Mr. Dickason said, ranging from increases of 20 per cent to decreases of 12 or 13 per cent.

The public universities' application rates appear to reflect the vagaries of local financial conditions more than national trends, he said.

At Pennsylvania State University, freshman applications for fall of 1982 have set a record, Mr. Dickason said: up more than 10 per cent in a year. For the university's two-year campuses, the increase was 33 per cent, he said.

Jobless Seek Retraining

The American Association of Community and Junior Colleges reported last week that the demand for community-college courses appeared to be exceeding the financial capacity of the institutions, and in some instances enrollment limits had been imposed.

In addition to the young people choosing community colleges because they are less expensive than four-year institutions, growing numbers of unemployed workers are seeking retraining to get the technical skills that are more in demand, said officials of the junior-college association.

At the University of Southern California, a private institution that will charge next fall's freshmen $7,000 tuition for the year, applications are down 8 per cent from a year ago, while the public University of California at Los Angeles has been turning away applicants in larger numbers than ever before.

Alan P. Feddersen, an administrative analyst at U.C.L.A., said that although it had received about 20 per cent more applications, the university was accepting fewer applicants than last year. To compensate for the over-enrollment last year, U.C.L.A. is aiming at a freshman enrollment of 4,025 next fall, Mr. Feddersen said, down from 4,485 last fall.

A lot of people think that rising costs of private higher education are pushing more students into public colleges and universities, he said.

"It's one theory," he said, "but it hasn't been proven."

Fewer Minority-Group Applicants

Harvard and Radcliffe Colleges reported the third largest number of applications in their history—13,158. Admission was offered to 2,192, of whom about 1,600 were expected to enroll in the fall. William R. Fitzsimmons, acting dean of admissions and financial aid, said the colleges were concerned because the applicants included fewer minority-group students and fewer applicants whose parents had not attended college.

The number of applicants requesting financial aid declined slightly, Mr. Fitzsimmons said, perhaps indicating that less-affluent students are "beginning to select themselves out."

At the University of Wisconsin at Madison, officials reported that freshman applications were down 7 per cent—and applications from minority-group students were down 16 per cent—from the same time a year ago. The drop was attributed largely to a new $10 application fee, which may have discouraged students from applying unless they were seriously interested in enrolling. The university expected freshman enrollment next fall to be about the same as last year: between 4,600 and 4,700.

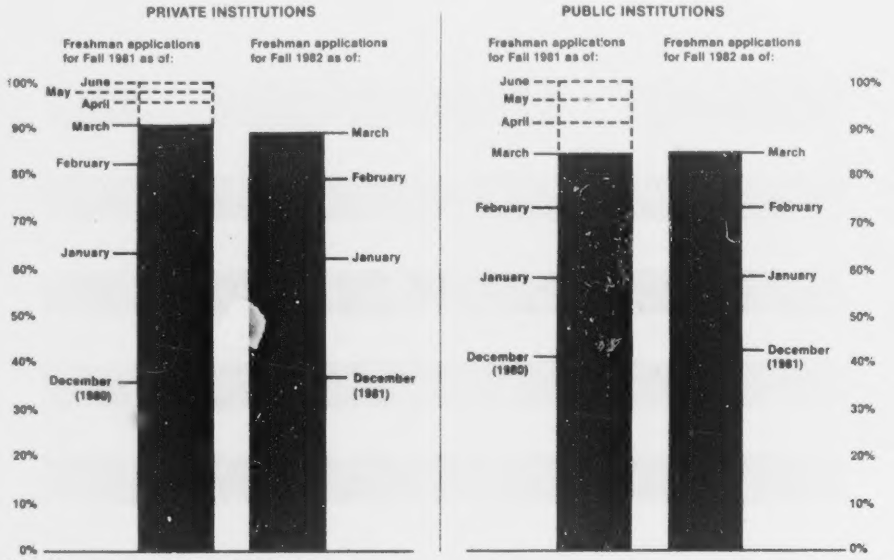
At Stanford University, the number of applicants this year was down slightly—to 13,900 from last year's 14,029. Admission was offered to 2,400 applicants, 17 per cent of the total. Stanford expects 1,500 to 1,550 of them to enroll.

The number of applications received by Brown University dropped about 1 per cent from last year's level. Brown offered admission to 2,590 of the 11,766 applicants—or 22 per cent. James H. Rogers, director of admissions, reported a 12-per-cent increase in applications from California, Oregon, and Washington, where the university had made special efforts at recruiting.

CHRONICLE SURVEY

Changes in Number of Freshman Applicants

March 31, 1982, compared with March 31, 1981



Note: All percentages are of June, 1981, total

CHRONICLE CHART BY PETER H. STAFFORD

	Change in average (a)	Per cent reporting increase	Per cent reporting decrease	Change: Low (b)	Change: Median (c)	Change: High (d)
Private colleges and universities						
Research and Ph.D.-granting	+ 0.3%	47.4%	52.6%	− 5.4%	− 0.6%	+ 4.3%
Comprehensive	− 1.5%	41.2%	58.8%	− 6.8%	− 2.6%	+ 6.2%
Liberal arts	− 2.7%	41.0%	54.2%	−13.7%	− 3.0%	+ 7.1%
Regions						
Northeast and Mid-Atlantic	− 0.6%	45.3%	52.8%	−10.2%	− 1.6%	+ 4.8%
Great Lakes and Plains	− 1.0%	47.3%	49.1%	− 6.1%	− 0.1%	+ 7.2%
Southeast	− 0.5%	34.5%	62.1%	−14.7%	− 5.0%	+ 7.5%
West and Southwest	− 2.6%	33.3%	66.7%	−10.8%	− 6.9%	+ 0.7%
Enrollment						
500 − 999	− 2.8%	43.6%	51.3%	−16.3%	− 2.1%	+10.5%
1,000 − 2,499	− 2.4%	39.7%	57.4%	−12.0%	− 2.6%	+ 5.4%
2,500 − 4,999	− 1.3%	47.8%	52.2%	− 8.0%	− 2.6%	+ 6.7%
5,000 − 9,999	+ 0.8%	47.1%	52.9%	− 3.4%	+ 0.6%	+ 2.3%
10,000 and over	− 0.9%	28.6%	71.4%	− 6.6%	− 4.1%	+ 1.8%
All private	**− 2.3%**	**41.5%**	**54.8%**	**− 9.7%**	**− 1.4%**	**+ 6.0%**
Public colleges and universities						
Research and Ph.D.-granting	+ 3.0%	63.5%	36.5%	− 2.8%	+ 2.8%	+11.2%
Comprehensive	+ 1.4%	58.2%	41.8%	− 8.1%	+ 4.1%	+14.5%
Regions						
Northeast and Mid-Atlantic	+ 6.6%	73.7%	26.3%	− 0.6%	+ 4.7%	+10.6%
Great Lakes and Plains	+ 0.9%	59.0%	41.0%	− 4.7%	+ 3.8%	+ 9.6%
Southeast	− 1.5%	46.4%	53.6%	−11.3%	− 1.0%	+ 5.2%
West and Southwest	+ 3.4%	71.4%	28.6%	− 8.2%	+11.8%	+20.6%
Enrollment						
500 − 2,499	+ 9.1%	70.0%	30.0%	− 6.1%	+ 8.5%	+46.2%
2,500 − 4,999	+ 8.3%	61.5%	38.5%	− 5.7%	+ 2.5%	+17.6%
5,000 − 9,999	− 3.2%	54.2%	45.8%	−10.0%	+ 0.4%	+11.2%
10,000 −19,999	− 1.0%	53.6%	46.4%	− 9.4%	+ 1.2%	+ 4.4%
20,000 and over	+ 5.2%	68.8%	31.3%	− 2.8%	+ 5.3%	+11.4%
All public institutions	**+ 1.8%**	**59.5%**	**40.5%**	**− 5.8%**	**+ 3.3%**	**+11.8%**
All institutions	**− 0.9%**	**47.8%**	**49.8%**	**− 7.8%**	**0.0%**	**+ 8.9%**

(a) Percentage change in mean number of applications by March 31, 1982, compared with the mean for a year earlier.
(b) The bottom one-fourth of the institutions reported smaller increases or larger decreases than the percentage shown.
(c) Half of the institutions reported smaller increases or larger decreases than the percentage shown.
(d) The top one-fourth of the institutions reported larger increases than the percentage shown.
Note: Survey data are from a stratified random sample of 262 four-year colleges and universities, excluding those with enrollment under 500.

SOURCE: SURVEY FOR THE CHRONICLE BY JOHN MINTER ASSOCIATES
P.O. BOX 107, BOULDER, COLO. 80306

U. of Mid-America Facing June Financial Deadlines

LINCOLN, NEB.

The University of Mid-America, a consortium of Midwestern universities that plans to establish a national open university next fall, must raise about $2.3-million by June 1 or cut its operations substantially.

The institution could even go out of business.

"Realistically, we have to have either commitments or pledges for $2.3-million to be able to say we can go ahead with our plans," said Milan Wall, vice-president of the consortium.

"We don't need all the money in hand by June 1," he said, "but we have to able to demonstrate that we will have enough funding to keep going.

"If that does not happen, we will have to look carefully at options for our organization. These could go all the way from dissolution to cutting operations to a minimum and keeping a small staff."

The consortium, which has been planning the American Open University since 1980, sent a memo to staff members early this year alerting them to the organization's financial prospects. The directive stated that "we have every confidence that we will find funds, but we want you to know that no one's job is secure," according to Mr. Wall.

Several employees have left recently as their grant projects have been completed.

The University of Mid-America has been supported almost entirely by money from the National Institute of Education since it was established in 1974 by 11 Midwestern state universities. The current N.I.E. grant will expire at the end of this fiscal year. The institute has indicated that the financing is unlikely to be extended.

Mr. Wall said that "opportunities are good for sufficient help from the private sector" to keep the institution operating and enable it to launch the open university as planned. By the end of its third year of operation, he said, "assuming a most modest organization," the national adult-education institution could support itself with tuition and fees.

The consortium has organized a small "development task force" of television and business executives to help seek financial support from corporations and foundations.

"By the end of the fiscal year in September," Mr. Wall said, "we will either have new glories and new successes, or, conceivably, no one will have a job." —BEVERLY T. WATKINS

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nerican Colleges Survived the 70's: Page 5

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News Summary

Articles on inside pages

Black students at Harvard University are protesting a decision to offer joint appointments to professors and visiting scholars in Afro-American studies. Story on Page 3.

Meharry Medical College is trying to gain access to teaching resources at two public hospitals in Nashville. Story on Page 4.

Business-school accreditors will have more leeway in evaluating programs under new standards adopted by the American Assembly of Collegiate Schools of Business. Story on Page 10.

Upper-income students will find it harder to obtain guaranteed loans under new rules issued by the Department of Education. Story on Page 11.

The transfer of the director of the federal Women's Educational Equity Act program has sparked the latest in a series of controversies surrounding the program. Story on Page 11.

A proposal to reserve 3 per cent of federal research funds for small businesses faces tough going in the House of Representatives. Story on Page 11.

Noam Chomsky, a noted linguist, is not afraid to use his status as a scholar on behalf of his political beliefs. Story on Page 19.

Demonstrators barricaded themselves inside the gates of Warsaw University to protest martial law in Poland. Story on Page 17.

South African police fired on demonstrators at the predominantly black University of Fort Hare in Cape Province. Story on Page 17.

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TIAA-CREF to Defer 'Unisex' Pensions Until Courts Resolve 2 Lawsuits

U.S. employment commission, New York State have found fault with proposed plans

By CHERYL M. FIELDS

NEW YORK

The Teachers Insurance and Annuity Association–College Retirement Equities Fund has told a federal judge that it will not begin offering a "unisex" pension plan until the courts resolve two lawsuits challenging the unequal payments that men and women now receive under its programs.

The insurance company has drawn up three plans in the past two years that would pay women who retire in the future the same monthly sums as men receive, based on contributions they make after a unisex plan is adopted.

However, either the Equal Employment Opportunity Commission or the New York State Superintendent of Insurance has found fault with each of the plans—on the grounds that they would discriminate against men or not offer all the advantages that the company's retirement plans now do.

The unisex plans were drawn up under the supervision of Judge Robert J. Ward of the U.S. District Court for the Southern District of New York to try to resolve a lawsuit filed against the insurance company and Long Island University by a female faculty member, Diana L. Spirt.

In April, 1981, the U.S. Court of Appeals for the Sixth Circuit heard arguments in another case, *Peters* v. *Wayne State University*, challenging T.I.A.A.-C.R.E.F.'s payment of lower monthly pension benefits to women, but it has not yet issued a ruling.

The lower benefits that female retirees now receive are based on "sex-segregated" mortality tables showing that the average woman lives longer than the average man and thus will collect benefits longer.

As a result of its difficulties in winning approval of the unisex plans, T.I.A.A.-C.R.E.F. said it had "made substantial efforts over the past several years to compromise and to settle the issues involved. Every effort has been rebuffed." Thus, the

Continued on Page 10, Column 1

NLRB Rules Professors at 3 Private Institutions Are Managers, Those at 2 Others May Bargain

By BEVERLY T. WATKINS

WASHINGTON

The National Labor Relations Board ruled last week that faculty members at three private institutions of higher education—Ithaca College, Thiel College, and Duquesne University's law school—are managerial employees and hence may not engage in collective bargaining under federal labor law.

At the same time, the board ruled that faculty members at Bradford College are not managerial employees under the National Labor Relations Act and therefore may form a union and negotiate with their institution. It issued a similar ruling in a case involving physicians at Montefiore Hospital and Medical Center, who are also faculty members at the Albert Einstein College of Medicine of Yeshiva University.

The decisions resolved 5 of an estimated 40 academic-collective-bargaining cases that have been pending before the N.L.R.B. as a result of the U.S. Supreme Court's decision more than two years ago in the *Yeshiva University* case.

In a 5-to-4 decision, the Supreme Court ruled that faculty members at Yeshiva, a private, religiously affiliated institution in New York, were managerial employees who were not authorized to bargain under federal labor law. The majority opinion held that the faculty members, who "effectively determined" the curriculum and made decisions about hiring, promoting, and awarding tenure to faculty members, had so much authority over academic matters and institutional policies that, "essentially, they ran the university.

The N.L.R.B. has come under increasing

Continued on Page 12, Column 1

Probing the Lives of California's Fierce Elephant Seals

By KIM McDONALD

SANTA CRUZ, CAL.

Striding confidently along the beach, Burney J. Le Boeuf turns to an apprehensive companion following close on his heels. "They can move very fast," he says, pointing to several one-ton, torpedo-shaped behemoths nearby who glare and bellow threateningly. "So you want to be in a position to move."

Every year, between mid-December and mid-March, thousands of elephant seals jam Año Nuevo, a stretch of beach south of San Francisco, to mate, molt, and give birth. And every year, Mr. Le Boeuf and his students at the University of California at Santa Cruz come here to record the births, deaths, and social behavior of these little-known pinnipeds.

A biology professor at the Santa Cruz campus with a doctorate in psychology, Mr. Le Boeuf believes elephant seals are ideal creatures from which to learn how social and reproductive behavior can affect the survival and evolution of a species.

Their large size and the fact that they interact socially on an open beach, "not in a jungle," make them easy subjects to observe. Elephant-seal bulls—which sport the trunk-like snouts that give

Continued on Page 8, Column 1

UNIVERSITY OF CALIFORNIA AT SANTA CRUZ

Santa Cruz Biology Professor Burney J. Le Boeuf

THE MINTER-BOWEN REPORT, PART I

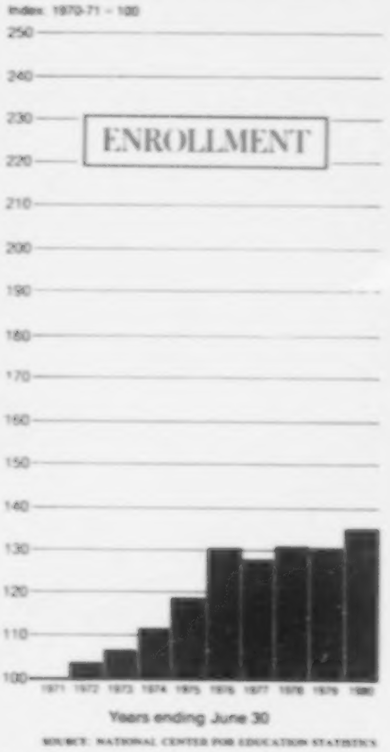
Despite Economic Ills, Colleges Weathered the 70's with Larger Enrollments and Stronger Programs

By W. JOHN MINTER
and HOWARD R. BOWEN

American higher education faces the possibility of austerity greater than at any time since the Great Depression and World War II.

The authors believe that recent developments will be more meaningful if they are seen in the context of trends over the decade from 1969-70 to 1979-80.

In the early 1970's, it was widely believed that the private sector of American higher education was on the brink of disaster.



SOURCE: NATIONAL CENTER FOR EDUCATION STATISTICS

Many stories were circulated and books and articles written to the effect that the private sector was deteriorating and that many private institutions had already expired or were on the verge of doing so. Later on, there were similar concerns about the financial position of the public sector.

Nevertheless, the environment of American higher education in the 1970's enabled most institutions to maintain their poise and survive. They were able to hold their organizations together, provide reasonably good education, and still balance their budgets.

But the decade was a time of sustained financial stringency.

Revenues were essentially level (after adjustment for inflation and enrollment growth).

Merely to keep revenues level, it was necessary for most institutions to maintain their enrollment. That usually involved increased cost for student recruitment and student aid, and often required the introduction of popular new courses and fields of study—for example, business administration, law, computer science, and medical technology.

Moreover, some regular costs were rising faster than the rate of inflation—for example, energy, books, scientific equipment, and building materials. Given level resources, to cover the costs that were increasing it was necessary to compensate by cutting other costs. This the institutions did primarily in three ways:

▶ They effected innumerable little economies—for example, by cutting energy use, shortening library hours, reducing faculty travel and assistance, eliminating memberships in professional associations, dropping football, resorting to increasing numbers of part-time faculty members, rotating young, nontenured faculty members, cutting the quality of food, shortening the academic year.

▶ They deferred the maintenance and replacement of assets.

▶ They reduced the real compensation of faculty and staff members.

Those devices were adopted in ways that would keep the institutions operating without obvious impairment of educational performance, and yet keep the budget in balance. In this process faculty and staff compensation was the residual adjustment item in the budget. Compensation in real terms had to be reduced to whatever extent was necessary to make ends meet.

Births and Deaths

The widespread fears in the early 1970's that the ranks of private colleges and universities would be decimated proved to be unfounded. The great majority of institutions were able to adjust to mildly depressed conditions. Although there were deaths among the private institutions, there were also births. Most of the deaths involved small and obscure institutions that had never taken root and a few that were victims of poor management. There were no Penn-Centrals or Chryslers, and no significant decline in overall number of institutions.

Public Attitudes

Public attitudes toward higher education during the 1970's remained on the whole favorable. True, the attitudes were less euphoric—perhaps more realistic—than they had been in the 1950's and 1960's. Yet study after study showed that both students and alumni were appreciative of their college experience. Most members of the public expressed favorable views toward higher education. Parents in particular indicated overwhelmingly that they hoped and expected that their sons and daughters would attend college.

Enrollment

More convincing than public attitudes are the facts on enrollment. Between 1969-70 and 1979-80, the number of people attending college rose from 8 million to 11.6 million, an increase of 45 per cent. In terms of full-time-equivalent enrollment, the increase was from 6.3 million to 8.5 million, a gain of 35 per cent.

There were important shifts in the composition of the student population—relatively more women, more older students, more two-year-college students, more part-time students, and more minorities—reflecting a major advance in the democratization of higher education.

Toward the end of the decade, the rate of gain slowed. But certainly there was no decline in overall public participation in higher education.

Changes in the ability levels and secondary-school participation of students were mixed. Generally the institutions reported little change in their ability to attract and retain qualified students. But they were almost vociferous in their complaints about the deterioration of the high-school preparation of their students.

The shifts in the composition of the student body necessitated substantial curricular and administrative changes and generally complicated the educational task.

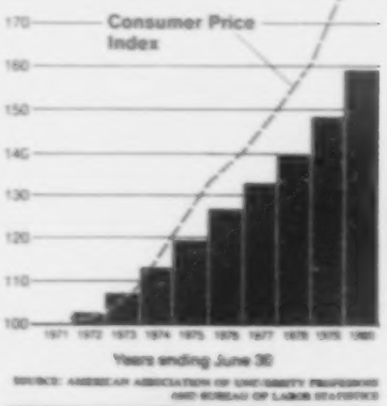
Faculty

During the 1970's, the institutions were able to achieve a slight increase in the ratio of faculty members to students. Nationwide, the ratio (in full-time-equivalents) was about 1 to 14.7 in 1969-70 and 1 to 14.1 in 1979-80.

The colleges and universities also granted substantial increases in faculty compensation, amounting to about 60 per cent. But much of that was eroded by inflation. In real dollars, the rate of faculty compensation declined over the decade by about 19 per cent. Indeed, faculty members (together with administrators and general-service workers) bore the brunt of the financial stringency that occurred during much of the 1970's.

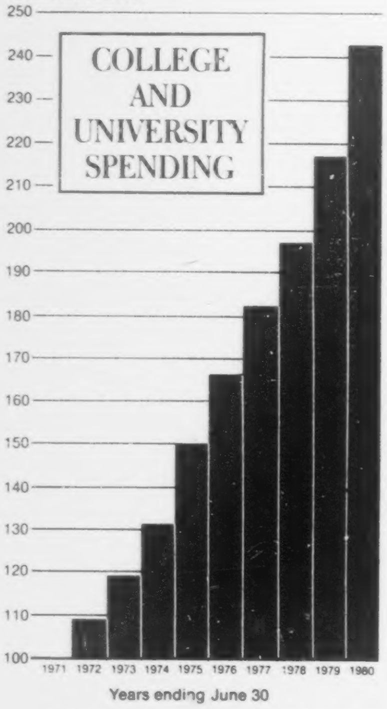
Nevertheless, the institutions were able to maintain qualified faculties. They reported overwhelmingly that the competence and performance of the faculty were improving.

Clearly, the reduction in real pay was not sufficient to cause a stampede out of academe.



SOURCE: AMERICAN ASSOCIATION OF UNIVERSITY PROFESSORS AND BUREAU OF LABOR STATISTICS

There was a great deal of concern and discussion about tenure during the 1970's. The percentage of faculty members with tenured appointments increased slowly, and at the end of the decade the proportion with tenure was about 68 per cent in the public sector and 56 per cent in the private sector. Institutions became increasingly cautious in the granting of tenure, and some of the fears about excessive tenure did not materialize.



SOURCE: NATIONAL CENTER FOR EDUCATION STATISTICS

The proportion of women on the faculties increased slowly in the 1970's, and by 1979-80 had reached 26 per cent of the full-time instructional faculty.

There was also a substantial increase in the proportion of part-time faculty members—from 22 per cent of those ranked as instructor or above in 1969-70 to 31 per cent in 1979-80.

In general, the position of the faculty appears to have held steady during the 1970's, surprisingly so in view of the substantial cut in real pay.

Administrative and General-Service Staff

Information about the administrative and general-service staff is relatively scarce, but it is apparent that the numbers in these groups increased somewhat more than the numbers of faculty members, and also that their dollar compensation increased more (or their real compensation decreased less) than that of the faculty. Thus, the share of college and university budgets going to administration and general-service employees increased during the 1970's. Those changes occurred not because they were desired by academic lead-

Continued on Following Page

Higher Education in the 70's

Continued from Preceding Page

ers but because of new functions and obligations that had been imposed on the institutions.

Retrenchment

In all of our surveys, we tried hard to learn whether the financial stringency of the 1970's was leading to the cutting back of essential activities. In many different ways, we tried to elicit information about the dropping of educational programs, curtailment of student services, inability to launch new activities, etc.

Over all, we found little evidence of programmatic retrenchment. Rather, despite the reality of slowly tightening budgets, we found many indications of expansion—even proliferation—of activities, strengthened programs, and, surprisingly, of cautious confidence and morale. Those results were surprising to us. We had expected to find desperation; what we really found was restrained confidence. The explanation, of course, was that in the effort to adapt operations to changing market demands, institutions were diversifying and strengthening programs.

Revenues and Expenditures

As part of our review of higher-education trends in the 1970's, we made a careful survey of institutional finances. This included an examination of operating revenues and expenditures and also of assets and liabilities.

Our financial data were exceptionally reliable. They were based on audited financial statements of our sample of institutions, and were reinforced by similar data from many other institutions. The financial statements as submitted by the institutions were edited to meet the guidelines of the American Institute of Certified Public Accountants and the National Association of College and University Business Officers, and the edited versions were verified by the reporting institutions themselves. Moreover, in retrospect, our sample data were verified by reference to the aggregate figures issued by the National Center for Education Statistics.

Current operating revenues and expenditures of all colleges and universities increased from about $21.5-billion in 1969-70 to about $55-billion in 1979-80, an increase of 156 per cent. When these figures are adjusted for changes in the general price level (as measured by the Consumer Price Index), the increase is reduced to about 36 per cent. And when the figures are further adjusted for the growth in enrollment over the decade, the increase becomes negligible—less than 1 per cent.

The conclusion from those figures is that there was no appreciable change in the level of financing over the decade of the 1970's. That was true of both the public and private sectors.

Between 1969-70 and 1979-80, however, there were some minor ups and downs. In the early years of the decade, revenues (after adjustment for inflation and enrollment growth) increased by about 3 per cent, the high point being reached in 1972-73. After that there was a decline of about 8 per cent, the low point falling in 1975-76. Thereafter, there was an increase of about 6 per cent. The net of all these changes over the decade was an increase of 1 per cent.

Given the possibility of statistical error, it would be prudent to say merely that with some ups and downs, revenues kept pace with inflation and enrollment.

The sources of revenue, as measured by the percentage distribution from various sources, remained fairly steady through the 1970's—as indeed they have over many decades. The percentage from tuition and from direct payments of the federal government declined perceptibly, the long downward trend in the percentage derived from endowments continued, and the percentage from state governments increased somewhat.

One significant change that probably reflects an important trend is the partial shift of support for the two-year colleges from local to state government.

But on the whole, despite much sound and fury in the financing of higher education, the relative position of the several sources—tuition, direct appropriations from federal, state, and local governments, private gifts, and endowment income—remained fairly constant. One qualification is that because of increasing federal aid to students, federal dollars indirectly reaching higher education increased substantially. Similarly, the distribution of expenditures among various activities such as instruction, research, public service, student services, plant operation, and others did not change very much in the 1970's.

The one trend that bears watching is the slow decline in the percentage of institutional budgets devoted to instruction. That appears to have occurred in most types of institutions, public and private, and to have been most pronounced in the case of research universities. It is doubtless a sign of financial stringency in the face of the increasing demands for energy, student aid, maintenance, and other nonacademic costs.

Assets and Liabilities

To complete the financial analysis, we now turn to the balance sheets of colleges and universities in which their assets, liabilities, and fund balances (net worth) are reported. These data have limitations.

This is so partly because assets are carried in the institutional accounts at their acquisition value, which, in an inflationary period, understates their present value, and partly because the meaning of both assets and liabilities is ambiguous for public institutions, which have the financial power of the body politic behind them. Nevertheless, some relevant evidence can be drawn from these data.

In general, for the private sector they reflect stability. There was no widespread resort to borrowing, and the indebtedness at the end of the decade (after adjustment for inflation) was no greater than at the beginning.

There was some increase in interfund borrowing [temporary transfers between accounts within an institution]—often a sign of financial stress. This was especially evident among the research universities, the less selective liberal-arts colleges, and the two-year colleges. The various financial ratios—current liabilities to current assets and total liabilities to total assets, for example——improved somewhat over the decade.

For the public sector, the situation was perhaps a little less favorable.

Over all, the burden of debt was de-

Articles Will Analyze Trends in U.S. Higher Education

This is the first of a four-part series by W. John Minter and Howard R. Bowen on trends in American higher education. It continues, in a new format, a series of six studies published over the period 1975 to 1980.

"In view of the uncertainty and fluidity of the situation as seen in the early 1970's, we decided to conduct a continuing study of educational and financial trends based on samples of American colleges and universities," the authors say. "The purpose was to monitor the progress of our colleges and universities, distinguishing between rumor and fact and providing an early warning system in case of serious trouble."

Mr. Minter is a higher-education consultant in Boulder, Colo., and Mr. Bowen is professor of economics and education at the Claremont Graduate School.

Their previous reports were: *Private Higher Education*, published by the Association of American Colleges in 1975, 1976, and 1977; *Independent Higher Education*, published by the National Association of independent Colleges and Universities in 1978 and by the National Institute of Independent Colleges and Universities in 1980; and *Preserving America's Investment in Human Capital*, published in 1980 by the American Association of Community and Junior Colleges, the American Association of State Colleges and Universities, and the National Assocation of State Universities and Land-Grant Colleges.

The next three parts of the series will present the authors' data on trends in higher education for 1980-81 and 1981-82. Part II will cover students and faculty members; Part III will deal with the learning environment; and Part IV will present a financial analysis and conclusions.

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clining somewhat. However, short-term debt was increasing as a percentage of total debt. There were modest increases in particular kinds of short-term debt, especially among the doctorate-granting, comprehensive, and two-year institutions.

But those were all minor changes—straws in the wind—not signals of impending disaster.

Individual Institutions

Finally, in our studies of the progress of higher education during the 1970's, we tried to consider differences among individual institutions.

Most of our data generalize about the higher-education community as a whole, or about particular types of institutions taken as a group. This collective approach conceals differences among institutions.

Even though the mass of institutions were surviving or even prospering, there were always some that were suffering reverses, and a few that were in dire straits.

From year to year, we tried to identify institutions that were "losing ground." Each year, we judged that perhaps 20 per cent were in that category.

We learned, however, that colleges and universities were tough. In facing adversity they were usually resilient enough to rectify their problems. So our list of distressed private institutions changed from year to year, and few of the institutions actually expired after the mild shakeout in the early years of the decade.

Our conclusions about the public sector were different, because public institutions do not face bankruptcy. They may face declining resources, externally imposed changes of mission, or even liquidation, but with the financial power of a governmental unit behind them, they do not ordinarily go broke.

What happens to them becomes a political decision rather than a financial happening.

Nevertheless, we found among them differences in fortune—some gaining ground, some holding steady, and some losing ground. And our opinion was that the public institutions were faring a bit less well than the private institutions.

Generally, in the private sector, we found the greatest financial strength among the more selective liberal-arts colleges and the least in the less selective liberal-arts colleges and two-year colleges.

In the public sector, we found the greatest strength among the doctorate-granting universities and the least among the comprehensive universities and colleges.

Intangibles

In reporting on the progress of higher education during the 1970's, we would be remiss if we did not mention some intangible factors, which cannot be readily quantified or documented.

Many institutions have undoubtedly accumulated vast amounts of deferred maintenance of assets:

▶ Deferred maintenance of buildings, grounds, and equipment.

▶ Deferred replacement of worn-out or obsolete assets.

▶ Drawing down of reserves.

▶ Using for current operations gifts that should have gone into endowments.

▶ Failure to keep the library collection up to date.

▶ Failure to maintain inventories.

▶ Failure to purchase new equipment to keep pace with changing technologies.

Similarly, the failure to keep faculty and staff compensation rising with inflation and with increasing pay in other industries employing comparable labor may have impaired the ability of higher education to maintain its greatest asset, namely, its faculty and staff.

Educational quality may have slipped in ways that are not readily noticeable:

▶ The institutions have become very large, and may suffer from the impersonality and bureaucratic mentality associated with size.

▶ The relative number of commuter and part-time students has increased relative to the number of resident students.

▶ The number of part-time faculty members has increased, and the number of insecure nontenured faculty members has increased.

▶ Perhaps most important, the excessive vocational interests of students and the extreme market orientation of institutions may have resulted in overly vocational education and weakening of standards.

9 Private Colleges in Illinois Found Perilously Shaky

Nine private colleges in Illinois are in such bad financial shape that they may have difficulty surviving the next few years, a report to the Illinois Board of Higher Education said last week.

The colleges, which were not identified in the report, had deficits in fiscal 1980 equal to 12 per cent or more of their current revenues. Over the five fiscal years, 1976 through 1980, they had annual deficits averaging 4 per cent of revenues, the report said.

The study of Illinois private higher education from fiscal 1976 through fiscal 1980 found that most of the 52 institutions involved had maintained their financial strength.

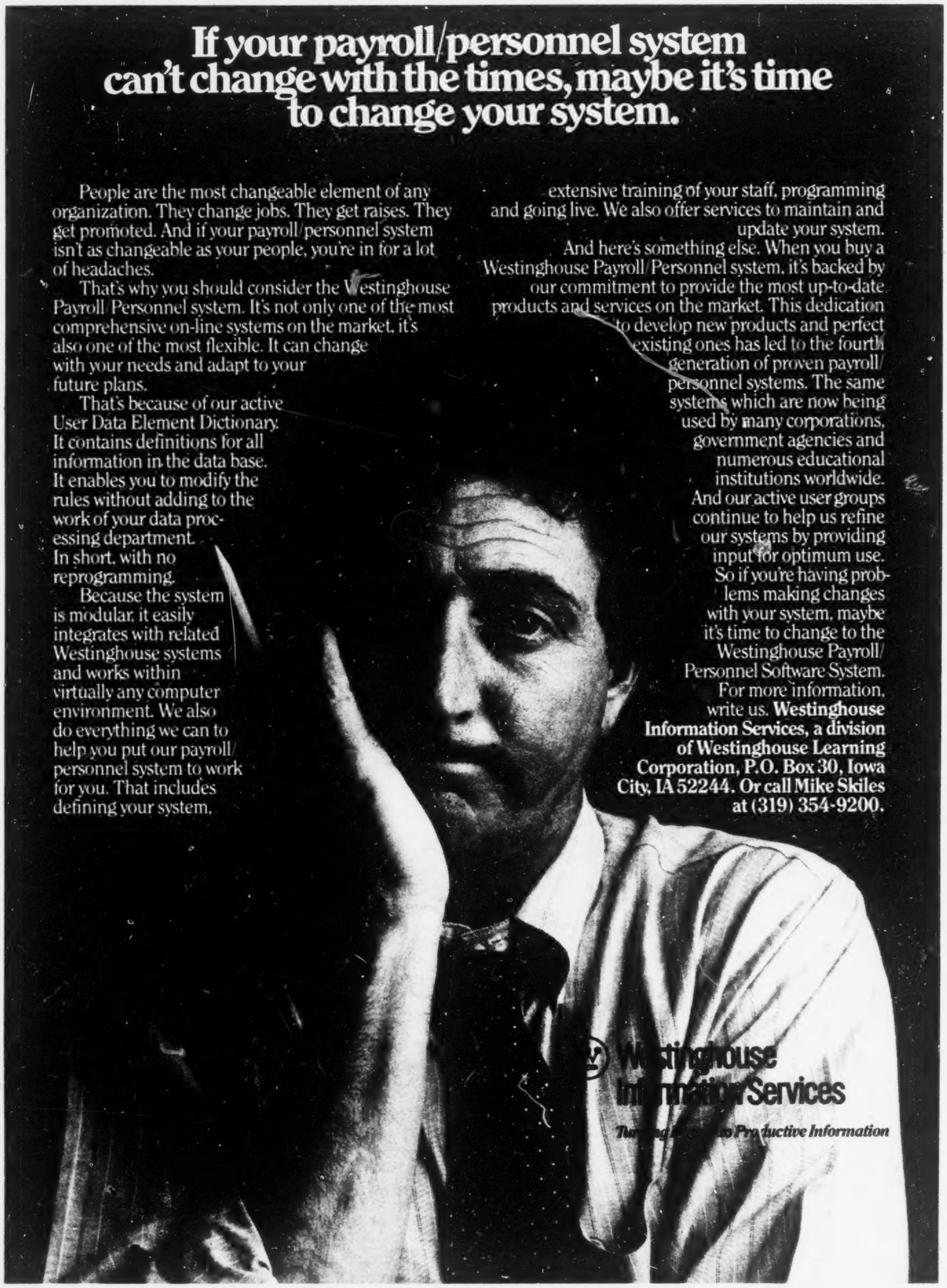
The nine most troubled colleges are primarily undergraduate institutions, the report said. Seven had fewer than 1,000 students.

"Projected enrollment decreases suggest that institutions operating on close financial margins will have further difficulty," the report said. "In addition, cutbacks in federal student aid could impair the ability of students who have financial need to enroll in independent institutions."

For private higher education generally, the report said, revenues and expenditures kept pace with inflation and revenues exceeded expenditures in each of the five fiscal years studied.

Endowment funds of the private institutions grew at an annual rate of more than 7 per cent, and income from endowment grew at an annual rate of 13 per cent, according to the report. State spending for private higher education increased at an annual rate of 7.8 per cent.

The competitive position of faculty salaries deteriorated somewhat during the five years and spending for libraries and maintenance slipped below the inflation rate, the report said.



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Diversification of Investments in Pension-Fund Portfolio

The following table shows the distribution of common-stock investments, by industry, of the College Retirement Equities Fund, a nonprofit organization operating pension programs for college and university faculty members.

The investments had a market value, as of last December 31, of $8.9-billion. For calendar 1981, C.R.E.F.'s stock investments experienced a net loss—dividends minus an overall decrease in market value—of 1.46 per cent.

	Calender years		
	1979	1980	1981
Aerospace	1.23%	0.88%	0.62%
Air transport	0.18%	0.16%	0.14%
Aluminum and other nonferrous metals	3.18%	2.93%	2.33%
Banks	2.40%	2.43%	2.39%
Beverages	1.29%	1.17%	1.38%
Broadcasting	0.61%	0.82%	0.80%
Business services	0.59%	0.36%	0.36%
Chemicals and textiles	3.52%	3.44%	3.50%
Construction and mining equipment	1.57%	1.32%	1.14%
Construction materials and homebuilding	0.75%	0.44%	0.50%
Containers	0.63%	0.47%	0.52%
Cosmetics	1.48%	1.12%	0.85%
Drugs	2.95%	3.13%	4.90%
Electrical equipment	4.99%	4.94%	4.81%
Electronics	0.97%	1.62%	1.21%
Food and related products	1.38%	1.21%	1.74%
Food stores	1.59%	1.18%	1.21%
Forest products	0.26%	0.26%	0.35%
Hotels and restaurants	0.00%	0.00%	0.70%
Household goods and products	3.50%	3.09%	2.67%
Instruments	1.27%	1.58%	1.24%
Insurance	5.81%	4.27%	4.61%
Leisure time	1.18%	1.16%	1.22%
Machinery	1.54%	1.49%	1.28%
Motor vehicles, equipment, and tires	5.69%	3.85%	3.22%
Multi-industry	0.00%	1.08%	1.23%
Newspapers	0.91%	0.89%	0.82%
Office machines	8.88%	8.11%	6.57%
Paper products	3.93%	3.26%	2.52%
Petroleum, domestic	3.39%	5.62%	6.35%
Petroleum, international	10.13%	11.65%	8.47%
Petroleum services	3.15%	4.32%	3.68%
Photographic equipment	1.14%	1.22%	1.20%
Publishing	0.77%	0.91%	0.97%
Railroads	0.86%	1.59%	1.51%
Retail trade	1.24%	1.54%	1.39%
Savings and loan	0.42%	0.14%	0.28%
Steel	0.62%	0.65%	0.73%
Textile	0.13%	0.00%	0.00%
Tobacco	0.00%	0.00%	0.74%
Trucking and related industries	0.50%	0.72%	0.72%
Utilities, electric	2.33%	1.81%	3.47%
Utilities, gas and pipeline	2.88%	2.75%	2.39%
Utilities, telephone	7.55%	5.90%	6.72%
Foreign investments	2.61%	4.52%	6.55%

SOURCE: COLLEGE RETIREMENT EQUITIES FUND

'Unisex' Pensions *Continued from Page 1*

company told Judge Ward, "it would be imprudent . . . for T.I.A.A.-C.R.E.F. to consider any unisex implementation until final judicial review of the issues is completed."

The company saic [illegible] pose" a unisex plar [illegible] participants "faced [illegible] ity that within a yea [illegible] pellate resolution . [illegible] or permit a comple [illegible] plan or some mater [illegible] of."

Other lawyers fa [illegible] case said it was unl [illegible] posed by the lawsui [illegible] solved "within a yea[illegible] or less"—particularly since an appeal to the Supreme Court—by either the insurance company or the Equal Employment Opportunity Commission—is likely, however the appeals courts rule. The company has said repeatedly that the Supreme Court must eventually decide the issues raised by the cases.

Female plaintiffs and the E.E.O.C. maintain that unequal monthly payments to women violate the ban on bias in employment and fringe benefits imposed by Title VII of the Civil Rights Act of 1964.

Judge Ward recently reaffirmed a decision he handed down in 1979 holding that Long Island University could not maintain any retirement plan that used sex-based mortality tables for determining benefits.

T.I.A.A.-C.R.E.F. has appealed that decision to the U.S. Court of Appeals for the Second Circuit, which promised to move quickly on the case. A hearing has b[illegible]et for June 14.

[illegible] company, in the [illegible] ged Judge Ward to [illegible] led by the E.E.O.C. [illegible] Lewis the New [illegible] perintendent. The [illegible] ission is challeng[illegible] jection of one of [illegible] unisex plans, [illegible] ment commission [illegible] d. [illegible] that the company [illegible] the contractual right to make unilateral amendments as to age or sex" in the plans its members already were participating in.

Said a spokesman for the insurance company: "We can't do anything. Whichever way we have tried to proceed we have been stopped."

But a lawyer familiar with the litigation against T.I.A.A.-C.R.E.F. said, "We were very surprised at the company's statement. We believe it is a violation of the agreement they had worked out with the judge for the handling of future premiums."

Said another lawyer: "What T.I.A.A.-C.R.E.F. is saying is that it is not going to do anything to change the status quo unless ordered to do so by the Supreme Court. It has no intention of doing anything voluntarily, even if an appeals court says it is permissible to have a unisex plan."

Article not [illegible],
Covers court case
involving benefits,
not investments
BJG

Business-School Assembly Adopts Changes in Accreditation Standards

By ROBERT L. JACOBSON

HONOLULU

The association that accredits college and university business schools has voted to give its evaluators considerably more leeway in judging the quality of a school's program.

Officials of the group, the American Assembly of Collegiate Schools of Business, said the action amounted to the most sweeping revision of its accreditation standards since 1969.

They said the changes, adopted at the assembly's annual meeting here, were intended to reduce reliance on purely quantitative factors, such as student-faculty ratios and the percentage of faculty members with doctoral degrees.

The revisions also were designed to give individual schools more flexibility in managing their programs and making faculty assignments, the officials said.

The changes come at a time when the popularity of business education has created a need for many more professors of business than are available or being turned out.

A recent study by the assembly found vacancies in 20 per cent of its member schools' authorized tenure-track positions for professors with doctoral degrees.

Hard to Meet Requirements

Robert S. Kaplan, dean of business at Carnegie-Mellon University and chairman of an assembly study panel, said only about 50 or 60 of the 558 member schools could be considered "significant suppliers of new Ph.D.'s"—producing at least five a year.

The shortage has made it increasingly difficult for the business schools to meet the assembly's requirements for the distribution of full-time faculty members among various subjects, program levels, and administrative units. As a result, there has been growing pressure for reform, with some deans even threatening to withdraw their schools if no changes are made.

Richard R. Weeks, president-elect of the organization and chairman for the past year of its standing committee on standards, acknowledged those concerns at the meeting.

He also observed, however, that the issue of increased flexibility was controversial, and that it remained to be seen how the new standards, whose adoption his committee has recommended, would be applied in actual cases.

"There are some people who believe we're giving away the store," Mr. Weeks said, but he noted that others did not think the revisions went far enough.

Percentages Dropped

In one of the most important changes, business schools will no longer be required to have 40 per cent of their undergraduate credit hours and 75 per cent of their graduate credit hours taught by "full-time doctorally qualified faculty members."

Instead, the schools must now assure only that all students are being given "reasonably comparable opportunity to study with doctoral, full-time, and other qualified faculty."

Mr. Weeks indicated that some schools had been making bad assignments of faculty members just to satisfy the old percentage requirements.

The standards continue to specify that a certain proportion of a school's faculty must have the Ph.D. or its equivalent, and that the school must have the equivalent of one full-time faculty member for every 400 undergraduate credit hours offered, and one for every 300 graduate credit hours, as well.

The assembly did vote to allow schools that do not meet such numerical criteria to demonstrate that they are offering high-quality programs all the same.

Another modification will allow certain faculty members who lack a doctoral degree in the business fields they are teaching but are clearly "developing research competence" in those fields to be counted temporarily among those who have the degree. A limited number of faculty members without doctorates in any field who have "extensive professional involvement and . . . demonstrated research capability" also may be counted as though they had the advanced degrees.

According to the standards committee, one aim of the revisions on personnel is "to provide much greater flexibility in the utilization of personnel resources without diminishing overall high quality in any dimension."

Another change permits business schools to depart somewhat from a rule that all students be given at least one year's exposure to a "common body of knowledge," which includes courses in marketing, economics, accounting, organization theory, and administration. Schools that do so, however, must provide "justification."

"We're willing to be convinced" that such departures do not adversely affect a school's program, said Donald H. Driemeier, dean of the business school at the University of Missouri at St. Louis and outgoing chairman of the assembly's committee on initial accreditation.

> "There are some people who believe we're giving away the store."
>
> *–Richard R. Weeks, association president-elect*

Meanwhile, the assembly also approved a recommendation that official "interpretations" of its criteria be converted to "guidelines," thus encouraging a range of interpretations by accrediting teams.

The new standards also will require schools offering both bachelor's and master's degrees to seek new accreditation of both programs simultaneously. Under the old policy, five years could elapse after one program was reviewed before the other one needed to be inspected.

Mr. Weeks and other assembly officials conceded that many of the revisions would increase the burden on the evaluators seeking to assess a school's quality, and some deans remained unconvinced that their own flexibility was at all assured.

"We may have created the basis for greater flexibility, but we don't know that," said Richard J. Lewis, dean of the College of Business at Michigan State University.

He proposed in a resolution that assembly officials review the standards to see if additional changes would help in that regard. The resolution carried overwhelmingly.

Henry M. Morgan, dean of the School of Management at Boston University, called portions of the new standards on personnel "ambiguous," and said he and officials at other business schools were concerned about negative evaluations because of units beyond their own immediate jurisdiction or control.

On the other side, Ralph Westfall, dean of the College of Business Administration at the University of Illinois at Chicago Circle, said the new standards were "a backward step" that would weaken faculty quality. The assembly should "move ahead and, if anything, raise the standards," he said, while making other efforts to increase the supply of first-rate faculty members.

Assembly leaders said repeatedly at the meeting that the revisions were not meant to lower the standards.

Training of Evaluators

Mindful of such concerns, however, the assembly's new president, Lawrence E. McKibbin, dean of the College of Business Administration at the University of Oklahoma, announced plans to establish a special committee to help put the changes into effect.

The outgoing president, Bill R. Moeckel, dean of the business school at Miami University (Ohio), said the assembly would have to take "a great deal of care" in training evaluators to follow a more flexible approach.

William K. Laidlaw, Jr., executive vice-president of the assembly, said the key issue was whether evaluators would be able to turn down a low-quality school even if it technically satisfied the remaining numerical criteria. He added that if the teams relied too heavily on numbers, they would be "reined back in."

The changes in the standards mark a new stage in a reform movement that began several years ago with the transfer of authority to interpret the assembly's rules from a small appointed committee to its full council of accredited institutions.

Actions at the latest meeting brought to 231 the number of schools whose programs are accredited by the assembly. The council approved committee recommendations to accredit 8 of 15 applications at the bachelor's level and 24 of 29 applications at the master's level.

The other applications were either deferred or denied, but under an assembly policy the schools were not identified. Neither were two other schools whose programs were placed on probation.

The assembly also separately accredited 35 programs in accounting at 18 institutions—the first time it has given such recognition to a specialty within the business curriculum. The assembly decided to provide that accreditation two years ago, after professional accounting groups had threatened to establish their own accrediting process.

Accredited vs. Nonaccredited

At the latest assembly meeting, a controversy arose over the relationship between accredited business schools and several hundred nonaccredited schools that also belong to the assembly but do not have a vote on accreditation matters.

Lowell C. Smith, president of Nichols College, a private nonprofit institution devoted mainly to business education, challenged statements contained in a brochure published by the assembly that he said put accredited schools in a "favorable competitive position" over nonaccredited schools in recruiting high-school graduates.

Nichols College is not accredited by the assembly.

Mr. Smith said he was especially unhappy about a statement that while there were "probably good-quality schools not presently accredited" by the assembly, accreditation provided "certification that schools have met certain widely recognized and accepted standards."

The assembly passed the motion introduced by Mr. Smith urging its board of directors to stop publishing the brochure.

Washington Notes *Continued from Preceding Page*

Continued from Preceding Page

withdrawn because of allegations against the college in a Department of Education audit.

The proposal to give ownership of the land to D-Q University previously appeared to have strong support in the House Subcommittee on Postsecondary Education. However, it was quickly withdrawn after the damaging report was leaked to a newspaper. The report, which accused the college of padding its enrollment figures, "did massive public-relations and political damage to D-Q," said the bill's sponsor, Rep. Vic Fazio, Democrat of California.

Mr. Fazio criticized the auditor's findings as "unsystematic, incomplete, unspecific, and in one case naively prejudiced." But he withdrew the bill after concluding that the contents of the report were "fatal" to the college.

• New Members Appointed to Humanities Council

President Reagan has named six new members of the National Council on the Humanities, which oversees the operation of the National Endowment for the Humanities:

Rita R. Campbell, senior fellow, Hoover Institution.
A. Lawrence Chickering, executive director, Institute for Contemporary Studies, San Francisco.
Jeffrey Hart, professor of English literature, Dartmouth College.
Gertrude Himmelfarb, chairman of history, City University of New York.
James C. Laforce, Jr., dean of the graduate school of management, University of California at Los Angeles.
Peter J. Stanlis, professor of English, Rockford College.

• Briefly Noted

The Senate Committee on Labor and Human Resources has sent to the full Senate the nomination of Clarence Thomas, director of the Education Department's Office for Civil Rights, to be chairman of the Equal Employment Opportunity Commission. . . . The Senate Select Committee on Indian Affairs has reported a bill, s 792, that would establish a National Institute of Native American Culture and Arts Development. The measure would authorize $4-million in fiscal 1983 for the institute. . . . Sen. Orrin G. Hatch, Republican of Utah and chairman of the Senate Labor and Human Resources Committee, has issued a report calling for employers to be found in compliance with affirmative-action rules if they have made "good-faith efforts" to promote equal employment opportunity. Based on hearings his committee conducted on the Labor Department's Office of Federal Contract Compliance Programs, Mr. Hatch urged that the agency emphasize training women and members of minority groups for skilled jobs and let the Equal Employment Opportunity Commission investigate all complaints of job bias.

FACT-FILE

Colleges and Universities Among the Top 500 Defense Contractors, 1981

	Amount of contracts (add 000)	Rank in top 500
Johns Hopkins U.	$186,350	13
Mass. Inst. of Tech	163,827	15
Ill. Inst. of Tech	36,452	48
U. of California	29,878	57
Ga. Inst. of Tech Research Institute	18,261	72
Stanford U.	18,004	74
U. of Texas	16,514	78
U. of Rochester	15,044	86
Pennsylvania St. U.	15,018	87
U. of Dayton	13,551	93
U. of Washington	13,529	94
U. of Southern Cal.	12,614	97
Utah State U.	8,700	121
Carnegie-Mellon U.	7,295	135
U. of Maryland	6,775	138
U. of New Mexico	5,631	140
U. of Illinois	6,148	144
Ga. Inst. of Tech.	5,437	154
U. of Pennsylvania	5,424	155
Columbia U.	5,324	156
Cornell U.	4,087	179
U. of Wisconsin	4,047	185
New Mexico St. U.	3,994	186
Cal. Inst. of Tech.	3,981	187
U. of Michigan	3,504	199
Ohio State U. Research Fdn.	3,450	201
U. of Arizona	3,436	203
Oregon State U.	3,380	207
Texas A&M Research Fdn.	3,006	226
Boston College	2,868	229
Yale U.	2,801	231
U. of Miami	2,795	233
Princeton U.	2,684	236
Boston U.	2,584	241
Harvard U.	2,576	242
Northwestern U.	2,514	248
Colorado State U.	2,344	253
Case Western Reserve U.	2,335	254
George Washington U.	2,307	256
Virginia Poly. Inst. and St. U.	2,204	259
Oklahoma State U.	2,177	263
U. of Minnesota	1,980	277
Purdue U. Research Fdn.	1,962	278
Rensselaer Poly. Inst.	$1,942	279
U. of Hawaii	1,895	284
New Mexico Inst. of Mining and Tech.	1,843	285
U. of Pittsburgh	1,826	287
New York Polytechnic Inst.	1,783	292
New York St. U. Research Fdn.	1,780	295
U. of Rhode Island	1,749	299
U. of Florida	1,725	301
U. of Central Fla.	1,717	303
Texas Tech. U.	1,695	304
Stevens Inst. of Technology	1,669	311
Florida State U.	1,659	314
U. of Utah	1,647	316
Wentworth Inst. of Technology	1,627	321
U. of Colorado	1,607	322
Syracuse U.	1,587	325
U. of Massachusetts	1,577	326
Northeastern U.	1,554	328
Brown U.	1,341	353
Duke U.	1,335	356
U. of Virginia	1,297	362
Georgetown U.	1,257	368
U. of Iowa	1,223	374
No. Carolina St. U.	1,201	380
U. of Alabama	1,158	387
Ohio State U.	1,149	389
New York U.	1,134	392
Lehigh U.	1,099	399
U. of Denver	1,084	401
U. of Tennessee	1,061	407
U. of Missouri	1,040	416
Washington U. (Mo.)	1,033	418
Louisiana State U.	1,020	420
Clemson U.	963	430
Drexel U.	952	436
Washington St. U.	935	442
Michigan State U.	863	458
U. of No. Carolina	859	460
Emmanuel College (Mass.)	813	473
Michigan Tech. U.	787	482
Syracuse U. Research Corp.	775	490

SOURCE: U.S. DEPARTMENT OF DEFENSE

In Federal Agencies

Energy Department rules. The Department of Energy has published an agenda of the regulations it will review or develop during the next six months. (*Federal Register*, May 4, pages 19,304-6.)

Health institute. The Public Health Service has published a notice outlining organizational changes in the National Institute of Arthritis, Diabetes, and Digestive and Kidney Diseases. (*Federal Register*, April 30, pages 18,673-5.)

Labor Department rules. The Department of Labor has published an agenda of the regulations it will review or develop during the next six months. (*Federal Register*, April 30, pages 18,706-27.)

Science foundation. The National Science Foundation has published a list of regulations it will review or develop within the next six months. (*Federal Register*, April 30, page 18,634.)

Student aid. The Department of Education has published final regulations governing the award of unused College Work-Study funds. (*Federal Register*, May 3, pages 18,852-54.)

Student aid. The Department of Education has proposed amendments to its regulations for the Pell Grant and other student-assistance programs. The proposed changes would establish specific academic-progress standards for students who receive federal financial aid, and also would establish accountability requirements for the institutions the students attend. The public has until June 3 to comment. (*Federal Register*, May 4, pages 19,288-95.)

Student loans. The Department of Education has published a notice amending the family-contribution schedule for the agency's Guaranteed Student Loan program. The new rules change the eligibility formulas for college students from upper-income families, and specify that students declaring themselves financially independent must receive less than $750 a year from their parents and cannot live more than six weeks at home during the year. The revisions apply to loans awarded between July 1, 1982, and June 30, 1983. (*Federal Register*, May 3, pages 19,086-7.)

Veterans' education. The Veterans Administration has published proposed regulations that would liberalize the method of determining the last date a surviving spouse of a veteran may receive dependents' education assistance. The regulations would also liberalize the approval requirements for nonaccredited courses. The public may comment until June 1. (*Federal Register*, May 5, pages 19,380-1.)

Congressional Hearings

WASHINGTON

The following Congressional hearings of interest to educators and scientists are scheduled for coming weeks. Since times, places, and witnesses frequently change with little advance notice, it is advisable to check with committees by telephone on or near the appointed dates.

SENATE

Humanities appropriations. May 11. Hearing on the proposed fiscal 1983 budget for the National Endowment for the Humanities. Contact: Senate Appropriations Subcommittee on the Interior and Related Agencies; (202) 224-7262.

High technology. May 11. Hearing on the effectiveness of the federal government in enforcing export controls to limit the transfer of high technology to the Soviet Union. Contact: Senate Governmental Affairs Subcommittee on Investigations; (202) 224-3721.

Guidance and counseling. May 12. Oversight hearing on the guidance and counseling programs of the Department of Education. Contact: Senate Committee on Labor and Resources, Subcommittee on Education, Arts, and Humanities; (202) 224-2962.

Student Loan Marketing Association. May 12. Oversight hearing on student financial aid and the Student Loan Marketing Association. Contact: Senate Committee on Labor and Resources, Subcommittee on Education, Arts, and Humanities; (202) 224-2962.

Indian education. May 18 and 19. Oversight hearings on Indian-education programs. Contact: Senate Select Committee on Indian Affairs; (202) 224-2[illegible].

HOUSE OF REPRESENTATIVES

Museum appropriations. May 10. Hearing on the proposed fiscal 1983 budget for the Institute of Museum Services. Contact: House Appropriations Subcommittee on the Interior; (202) 225-3081.

Teacher excellence. May 11. Mark-up of H J RES 476, to create state commissions on teacher excellence. Contact: House Subcommittee on Postsecondary Education; (202) 225-8881.

Student financial aid. May 12-13. Hearings on proposed redefinition of student financial assistance under civil-rights laws. Contact: House Subcommittee on Postsecondary Education; (202) 225-8881.

Arts appropriations. May 19. Hearing on the proposed fiscal 1983 budget for the National Endowment for the Arts. Contact: House Appropriations Subcommittee on the Interior; (202) 225-3081.

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News Summary

Articles on inside pages

In a runoff election, only 19 votes separated the two unions seeking to represent the faculty members of the California State University system, and 508 ballots have been challenged. Story on Page 3.

A successful lawsuit against the University of Arizona has won its student newspaper, the *Daily Wildcat*, a large measure of respect and a clutch of awards. Story on Page 5.

The market value of the common-stock investments of the College Retirement Equities Fund totaled nearly $9-billion as of December 31. Fact-File on Pages 10 and 11.

Faculty members are bearing the brunt of the financial squeeze at U.S. colleges and universities. Part II of the Minter-Bowen series appears on Page 7.

The addition of more than 100 experts to review grant proposals submitted to the National Institute of Education stirs fears that the process is being politicized. Story on Page 13.

James B. Wyngaarden, former chairman of the department of medicine at Duke University's medical school, has been sworn in as the twelfth director of the National Institutes of Health. Story on Page 13.

A guide to the editing of Old French manuscripts has won a following among medieval scholars. Story on Page 21.

A Polish scientist is at the heart of a recent diplomatic dispute between the United States and Poland. Story on Page 19.

A university in Great Britain has begun actively recruiting American high-school students for its undergraduate program. Story on Page 19.

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Senate Budget Panel Votes to Freeze Aid to Colleges, Trim Guaranteed Loans

House Democrats, however, draw up plan that wouldn't cut student-loan funds at all

By JANET HOOK

WASHINGTON

Although the cost of the Guaranteed Student Loan program would be trimmed by $289-million, spending on most other college-aid programs would be frozen at this year's levels under the Senate Budget Committee's blueprint for the coming fiscal year.

The Republican-controlled panel defeated attempts by Democratic committee members to allocate more money for education programs in the budget resolution for fiscal 1983, which begins October 1. The student-loan cutbacks, however, are expected to meet opposition when the measure is considered by the full Senate.

In the House of Representatives, the Budget Committee began drafting its version of the budget resolution last week, working from a proposal that would require no reductions in student loans.

More for Health Research

The draft proposal, backed by Rep. James R. Jones, Democrat of Oklahoma and chairman of the House Budget Committee, also would allow some increases in other social programs, including student aid and health research.

While the budget panels skirmished over the budget for fiscal 1983, the House approved a measure providing $1.3-billion more for student loans in this year.

For fiscal 1983, once both houses agree on a budget resolution setting spending targets for broad categories of federal activities, other committees with jurisdiction over taxes, appropriations, and individual federal programs must decide how to meet the spending targets set by the resolution.

The resolution that was approved by the Senate Budget Committee, with the endorsement of President Reagan, would allocate about $25.5-billion for education and other social programs. That is about 9 per cent less than would be available in

Continued on Page 14, Column 1

Congress Weighs Bill to Force Aliens to Leave U.S. After Graduation

By LORENZO MIDDLETON

WASHINGTON

Congress is considering legislation that would require foreign students to return home for two years after graduating from college before being allowed to live and work permanently in the United States.

The measure, part of an effort to reduce the number of foreign nationals entering the U.S. work force, has come under attack from educators and industry groups. They argue that restrictions on "foreign talent" would lead to a critical shortage of professionals in engineering and other technical fields.

The proposal is part of a bill to reform U.S. immigration laws, scheduled to be considered this month by the House and Senate Judiciary Committees.

The measure, numbered S 2222 in the Senate and HR 5872 in the House, has already been approved by the immigration subcommittees of both houses.

Among its more controversial proposals are a provision that would impose sanctions on employers who knowingly hire aliens who lack the proper documents and another that would require foreign workers to carry national identity cards.

The major change affecting the 300,000 foreign students in this country is the proposal to require foreign students to return home for two years after graduating before applying for permanent residence in the United States. Students now may apply for such status as soon as they complete their education.

The proposal results from a concern among some lawmakers that "we're building up an excessive dependence in high-tech fields on foreign students," said Arnold H. Leibowitz, special counsel to the Senate immigration subcommittee.

Educators who have joined industry

Continued on Page 18, Column 3

BRIAN MCNEILL

"We are trying to anticipate the future so that we won't have to engage in the crisis kind of planning," says Chancellor Barbara Uehling.

Missouri Campus Bitterly Divided over How to 'Reallocate' Funds

By PAUL DESRUISSEAUX

COLUMBIA, MO.

On the campus of the University of Missouri here, the signs of spring came late and were decidedly makeshift: a white sheet bearing the spray-painted legend "SOCIAL WORK IS HERE TO STAY" draped from windows in Clark Hall; a crudely lettered placard taped to a glass door in Memorial Union defiantly announcing, "HELL NO, HOME EC WON'T GO!"

Hasty construction accounted for the homemade quality of the signs, for as the academic year drew quickly to a close, many students and faculty members were surprised to find themselves fighting for their academic lives—the survival of their programs.

In a year in which this campus has had to contend with a host of financial problems—some fabricated, critics allege—April was the cruelest month. It was on April 2 that proposals to "reallocate" nearly $12-million in operating funds over the next three years were announced. Among them were recommendations to eliminate 2 of the university's 14 colleges and to reduce substantially the offerings in 5 others.

The ensuing controversy divided the campus. "It has set department against department and colleague against colleague," says one dean. "It's civil war, with everyone trying to gore everyone else's bull."

In mid-April, the faculty voted to call for the resignation of Chancellor Barbara S. Uehling if she did not withdraw the proposals.

By the time graduating students were preparing for last week's commencement

Continued on Page 12, Column 1

THE MINTER-BOWEN REPORT, PART II

Colleges' Achievements in Recent Years Came Out of the Hides of Professors

By W. JOHN MINTER
and HOWARD R. BOWEN

Our review of trends relating to people in academe—students and members of the faculty and staff—reveals some of the difficulties associated with the conduct of mass higher education in a time of rapid inflation.

The country's colleges and universities, in the last few years, were educating a huge and highly varied student population, many members of which were not fully prepared for college and many of whom were concentrating on narrow and specific vocational objectives.

At the same time, revenues, though rising dramatically, never quite kept pace with the costs, and the result was a kind of chronic poverty.

Yet, through struggle and ingenuity, the higher-education enterprise held together.

The students were educated, research and public-service responsibilities were carried out, and most institutions could look back with some frustration but also with pride on the late 1970's and early 1980's as a time of considerable achievement.

That achievement, however, came to a large extent out of the hides of the faculty members.

Students

Despite the many predictions of an enrollment drop around 1979, when the number of 18-year-olds would begin to decline, the widely heralded event failed to materialize.

Total enrollment in all institutions of higher education from 1977-78 through 1981-82 increased as shown in Table 1. Over this period, more than a million additional students were added to total enrollment, and more than half a million to full-time equivalents. Moreover, data regarding freshman applications indicated a continuing, healthy interest of young people in higher education, although the number of freshman applicants as of February, 1982, was about 2 per cent lower than the number in February, 1981.

1: Total enrollment

	Total enrollment	1-year change	Estimated full-time equivalent
1977-78 ...	11,286,000	+ 2.5%	8,415,000
1978-79 ...	11,260,000	- 0.2%	8,361,000
1979-80 ...	11,570,000	+ 2.8%	8,562,000†
1980-81 ...	12,096,000	+ 4.6%	8,915,000†
1981-82 ...	12,322,000	+ 1.9%	9,044,000†

† Estimated by the authors

SOURCE: NATIONAL CENTER FOR EDUCATION STATISTICS

The trend in enrollment differed somewhat for different types of institution. Growth in recent years was concentrated primarily in the two-year colleges. However, no category of institution experienced severe enrollment losses.

The figures in Table 2, showing percentage changes in enrollment from 1980-81 to 1981-82, tell the story.

Those data do not lead to confident predictions about future enrollment. In all of our studies of trends in higher education, we have followed the practice of reporting up-to-date facts and have resisted the temptation to predict the future.

Also, the data conceal great differences among individual institutions. Some have lost enrollment, others have gained, and some have held steady.

However, it is evident that enrollment in most institutions has held up reasonably well; otherwise, there would be much more financial distress than we have found.

2: Enrollment changes

	Private	Public	Public and private
Universities	0.0%	+ 1.0%	+ 0.8%
Other 4-year institutions	0.0%	- 0.3%	- 0.3%
2-year colleges ..	+ 12.0%	+ 4.6%	+ 5.0%
All institutions ...	+ 0.9%	+ 2.0%	+ 1.8%

We have learned from past studies that when institutions lose enrollment in any given year, they make strenuous efforts to correct the shortfall. Thus, the incidence of declining enrollment tends to affect different institutions, and few experience prolonged declines.

Trends in the characteristics of the students were mixed.

Generally, throughout the 1970's, the institutions reported that the ability level of entering students remained fairly steady as measured by rank in high-school class, but declined as measured by College Board and American College Testing Program scores.

As the decade wore on, however, there was increasing concern about various student characteristics, including especially their secondary-school preparation. Those problems persisted into the 1980's.

In response to our most recent queries about students, chief academic officers and chief student-affairs officers reported the changes in secondary-school academic preparation that are shown by the figures in Table 3.

As the figures show, the great bulk of institutions reported no change (that is, no improvements over the deplorable conditions prevailing in the late 1970's), or they reported a continuing decrease in high-school preparation. Only a small proportion—less than one-sixth—indicated that the situation was improving.

Our respondents also commented on the attitudes, behavior, and achievement of their students. Some of the trends they reported were negative or at best controversial. They said, for example, that orientation to careers and consciousness of grades and credentials were still on the rise, that orientation toward liberal learning, interest in contemporary affairs, and political activism were on the wane, and that use of alcoholic beverages was increasing. On the other hand, the respondents told us that conscientious work, general academic achievement, and participation in extracurricular activities were gaining, and that drug use was on the decline. Those reports are not surprising to anyone in touch with the academic world. They suggest that recent trends in attitudes, behavior, and achievement on the part of students are persisting and appear to be fairly stable.

Faculty and Other Staff Members

The number of faculty members employed in higher education probably did not decline from 1979-80 to 1981-82, though the evidence is somewhat mixed. The most detailed available figures are presented in Table 4. The figures were compiled by the National Center for Education Statistics; they refer to full-time instructional faculty members on 9-month or 12-month contracts.

3: Preparation for college

	Better	Worse	No change
Public institutions			
Reading	16%	33%	47%
Writing	14%	36%	46%
Mathematics ...	15%	31%	47%
Humanities and social studies	9%	19%	59%
Sciences	14%	25%	53%
Private institutions			
Reading	15%	30%	53%
Writing	13%	36%	49%
Mathematics ...	14%	24%	58%
Humanities and social studies	7%	19%	64%
Sciences	9%	20%	62%

Note: Percentages for "Don't know" and "No answer" have been omitted.

The figures indicate that the number of full-time faculty members is declining slightly in all types of institutions except private universities and two-year colleges.

4: Number of faculty members

	1979-80	1980-81	Change
Private			
Universities	32,900	33,400	+ 1.5%
Other 4-year institutions ...	69,900	69,300	- 0.9%
2-year colleges	4,800	5,600	+ 16.7%
All types	107,600	108,200	+ 0.6%
Public			
Universities	91,500	90,600	- 1.0%
Other 4-year institutions ...	113,900	112,800	- 1.0%
2-year colleges	83,400	84,500	+ 1.3%
All types	288,800	287,800	- 0.3%
Private and public			
Universities	124,500	123,900	- 0.5%
Other 4-year institutions ...	183,800	182,100	- 0.9%
2-year colleges	88,200	90,000	+ 2.0%
All types	396,400	396,000	- 0.1%

SOURCE: NATIONAL CENTER FOR EDUCATION STATISTICS "TENURE AND BENEFITS" 1979-80 AND 1980-81

They do not necessarily mean that wholesale layoffs are occurring. Reductions in force of about 1 per cent a year or less can easily be achieved through normal attrition. Moreover, since the figures refer only to full-time faculty members, they do not reflect the recent increases in the number of part-timers. Thus, we judge that the total faculty, in full-time equivalents, has been growing from 1979-80 to 1981-82 at the rate of about 1 per cent a year.

Just as enrollment growth has been greatest at two-year colleges, the growth in the number of faculty members has also been the greatest at those institutions.

Our tentative conclusion is that the ratio of faculty members to students has not changed much in recent years, but that the ratio of full-time faculty members to students has declined. That change, though not pronounced, will be regarded by many as a negative indicator.

Significant changes in faculty turnover have been occurring. For most types of institution, the percentage of the faculty leaving each year has been declining. This suggests that in a tight labor market faculty members are holding onto their jobs.

5: Tenured faculty members

	Private		Public	
	1979-80	1981-82	1979-80	1981-82
Universities ..	57%	58%	62%	64%
Comprehensive institutions	64%	64%	63%	64%
Selective liberal-arts colleges ...	67%	69%	——	——
Less selective liberal-arts colleges ...	48%	49%	——	——
2-year colleges	——	——	64%	69%
All institutions	54%	55%	63%	67%

Along the same line, the percentage of faculty members on tenure has been slowly creeping up. The figures in Table 5 show changes in the tenure percentages.

Considering the fact that faculty turn-

Continued on Following Page

Next: the Learning Environment

This is the second of a four-part series by W. John Minter and Howard R. Bowen on trends in American higher education. Part III will deal with the learning environment. Part IV will present a financial analysis and the authors' conclusions.

Mr. Minter is a higher-education consultant in Boulder, Colo., and Mr. Bowen is professor of economics and education at the Claremont Graduate School.

This Minter-Bowen report continues, in a new format, a series of six studies published over the period 1975 to 1980.

Their previous reports were: *Private Higher Education*, published by the Association of American Colleges in 1975, 1976, and 1977; *Independent Higher Education*, published by the National Association of Independent Colleges and Universities in 1978 and by the National Institute of Independent Colleges and Universities in 1980; and *Preserving America's Investment in Human Capital*, published in 1980 by the American Association of Community and Junior Colleges, the American Association of State Colleges and Universities, and the National Assocation of State Universities and Land-Grant Colleges.

Colleges' Achievements: Out of the Hides of Professors

Continued from Preceding Page

over has declined, it is clear that the institutions have been keeping a tight lid on the granting of tenure, and changes in the tenure percentage have been small—but greater in the public sector than in the private.

Faculty compensation (salaries plus fringe benefits) increased substantially from 1979-80 to 1981-82.

The institutions made a tremendous effort to improve the financial position of the faculty. But the forces of inflation were more powerful than the increases in dollar compensation, and the slow deterioration of the economic position of faculty members that had persisted over most of the 1970's continued.

6: Faculty compensation

	1979-80†	1980-81†	1981-82‡
Average compensation			
Private institutions	$23,872	$26,159	$28,275
Public institutions	25,965	28,392	30,975
All institutions	25,412	27,793	30,240
1-year change			
Private institutions	+ 8.1%	+ 9.6%	+ 8.1%
Public institutions	+ 9.2%	+ 9.4%	+ 9.1%
All institutions	+ 8.9%	+ 9.4%	+ 8.8%
Consumer Price Index	+ 12.6%	+ 11.2%	+ 10.8%

SOURCES: DATA FOR 1979-80 AND 1980-81 ARE FROM NATIONAL CENTER FOR EDUCATION STATISTICS, "TENURE AND BENEFITS" 1979-80 AND 1980-81. DATA FOR 1981-82 ARE ESTIMATED ON THE BASIS OF SURVEYS BY JOHN MINTER ASSOCIATES

The figures in Table 6 show the average compensation of full-time faculty members on nine-month contracts, and percentage changes from year to year. The percentage changes are quite similar for various types of institution.

Trends in working conditions for the faculty have been quite different in public, as compared with private, institutions.

Such prized amenities as secretarial assistance, research support, and professional travel have been cut back in the public sector but have been expanding in the private.

Similarly, teaching loads, measured in classroom hours, numbers of students, and other duties, have been increased substantially at many public institutions, while they have been increased only slightly in the private sector.

Those trends are among several indications that recent conditions in the public sector have been slightly more stringent than in the private sector.

Our data on faculty members suggest that the financial situation in American higher education has become increasingly tight—and the squeeze has been felt mainly by the faculty.

7: Salary increases

	Change since 1978-79		
	1979-80	1980-81	1981-82 ‡
Professional staff†			
Faculty	+ 7%	+ 16%	+ 26%
Administration	+ 8%	+ 18%	+ 30%
General-service staff†	+ 9%	+ 19%	+ 32%
Consumer Price Index	+ 12%	+ 26%	+ 36%

† D. Kent Halstead, National Institute for Education
‡ Estimated by the authors

The number of faculty members relative to students has held fairly steady, but faculty turnover has declined, the percentage on tenure has slowly inched up, the use of part-time faculty members has increased, faculty compensation in constant dollars has continued the steady decline that began in the 1970's, and the working conditions for faculty members have become gradually less favorable, especially in the public sector.

Faculty members are not the only people on the payrolls of academic institutions. Total salaries and fringe benefits of members of the administrative and general-service staffs cost almost as much as total faculty compensation.

In recent years, administrative salaries in current dollars have risen somewhat more rapidly than faculty salaries, and the salaries and wages of general-service-staff members have risen still more rapidly.

Percentage increases in staff compensation are shown in Table 7.

As those figures show, compensation increases for general-service workers have almost kept pace with the Consumer Price Index, administrative salaries have fallen somewhat behind the C.P.I., and faculty salaries have fallen substantially behind.

Professors, Deans, Presidents Leaving Northwest in Wake of Budget Cuts

By BARRY MITZMAN

SEATTLE

Because of deep cuts in state spending for higher education in Oregon and Washington, some faculty members and administrators are leaving the region for more lucrative jobs elsewhere.

Observers here are afraid the flow of resignations and early retirements, though still just a trickle, may increase in the coming months to a full-fledged "brain drain."

"A decade from now, this year will be viewed as a turning point," says William Iulo, an economics professor and chairman of the faculty senate at Washington State University. "We may see the removal of a large proportion of our senior people, and that has to change the character of the institutions," he says.

In one week in March, two college presidents in Oregon resigned.

Kenneth F. Light, president of the Oregon Institute of Technology, said his decision to step down had been "precipitated by the very low priority assigned higher education in the state budget."

Gerald Leinwand said in his letter of resignation as president of Western Oregon State College that budget cuts had made his job "utterly frustrating and unproductive."

At the University of Washington, three academic deans have quit since February, two of them blaming budget problems.

"I'm being asked to destroy the place," said George Schatzki in resigning as law dean at the University of Washington. Although Mr. Schatzki will remain on the law faculty, he says the University is "slowly deteriorating into mediocrity, at best."

Faculty members also are looking elsewhere, especially in high-demand fields such as the health sciences and business.

Of the 70 business professors at Washington State University, 7 have recently resigned and at least 20 are considering better-paying offers from other universities, according to Rom J. Markin, dean of business and economics.

Says Mr. Markin of his faculty: "They've got their feet over the gunwales, just waiting to jump ship."

Desertion may seem the wisest course, given the Pacific Northwest's foundering economy. Depression in the forest-products industry has brought hard times throughout the region.

And times have worsened lately. Dropping wheat prices have hurt farmers. Money-losing airlines have cut back their orders for new aircraft, forcing layoffs at the Boeing Company, Seattle's largest employer.

As business activity has declined, so have tax revenues, threatening to create huge state budget deficits.

Since January, 1981, legislators have convened twice in Oregon and three times in Washington to raise taxes and curtail spending. The successive budget cuts suffered by institutions of higher education have been less severe than had been feared, but they have been sizable.

In Washington, both two-year and four-year institutions lost about $78-million—or 6.8 per cent of the state funds originally appropriated for the 1981-83 biennium.

In Oregon, four-year colleges and universities have seen their 1981-83 state funds slashed by more than $24-million—about 7.7 per cent below the levels originally proposed by Gov. Victor Atiyeh. The governor's proposal represented an increase of only 2.5 per cent over 1979-81, says William Lemman, vice-chancellor of higher education.

Institutions in both states have responded by cutting back on maintenance, materials, travel, and support staff; gutting extension programs, limiting enrollment; and leaving vacant positions unfilled.

Mr. Lemman estimates that Oregon's eight state colleges and universities have already eliminated 300 academic positions and 110 other jobs.

Scheduled salary increases for faculty members have been delayed in Washington until June 30, 1983—the last day of the biennium. Institutions in Oregon are making similar salary adjustments, some by encouraging faculty members to take unpaid leaves.

Washington has thus far avoided eliminating academic programs or laying off tenured professors, but Oregon has not. The University of Oregon, for example, has disbanded its School of Community Service and Public Affairs, eliminating administrative positions and dispersing faculty members among other programs.

Western Oregon State College has been forced to dismiss 12 tenured and 4 nontenured professors. Some legislators have urged that the 2,900-student college be closed.

In both states, many observers say, money woes have hurt morale among faculty members and administrators. Predictably, some are bailing out.

"I did not expect to be faced with a series of continuing budget reductions," says Jared E. Hazelton, explaining his decision to resign after just 18 months as dean of the University of Washington's Graduate School of Public Affairs.

"If the steady erosion in budget support of the past two years continues," he says, "it's difficult to see how the school will be able to hold its own, much less move forward." Mr. Hazelton is leaving in July to become president of a research organization in Texas.

The faculty exodus may increase this fall at many Washington institutions, because of a change in state retirement rules. To ease the budget-cutting process, legislators have made it possible for many professors in their mid-50's to retire early with full benefits—if they leave before the end of this year.

Long Beach Orders Review of Women's Course

LONG BEACH, CAL.

California State University at Long Beach has ordered a review of a women's-studies course that women from an evangelical Christian group claim is promoting lesbianism.

Faculty members in the women's-studies program have agreed under protest to the review by a faculty curriculum committee, seeing it as a challenge to their academic freedom, according to Sondra Hale, director of the program.

The review of the course, "Women and Their Bodies," was ordered by Simeon J. Crowther, dean of the school of social and behavioral sciences, after a meeting between President Stephen Horn, aides of three conservative state legislators, and Jessica Reynolds Shaver, a representative of the evangelical group. The group, which says it wants to root out the teaching of deviant sexual behavior in schools, apparently sent some members to sit in on the course and to interview students outside the classroom about its content.

They later met with Ms. Hale, Mr. Crowther, and other university officials about what they said was the course's lesbian orientation.

They were upset by some of the material used in the course, particularly a recommended textbook, *Sapphistry: the Book of Lesbian Sexuality*, by Pat Califia.

They also complained to state legislators. Gordon Browning, administrative assistant to Sen. H. L. Richardson, a conservative Republican, said his office had received 25 books, films, and slides from the course that he found questionable.

Mrs. Shaver said some of the students interviewed by her group "were surprised and offended" by the course, and "two of them were scared by the bias" toward lesbianism. University officials said they had received no complaints about the course from students.

Mr. Crowther said he believed the course would win the curriculum committee's full support.

But he and other campus officials said they were troubled by the criticism. "This is my first experience with an organized attempt by off-campus interests to offer criticism of our curriculum, and I find this whole exercise unnerving," Mr. Crowther said.

—JACK McCURDY

More Campuses Emphasize General-Education Courses

BALTIMORE

The "overall academic climate" on college campuses has become more supportive of general education in the last three years, according to a new report.

More and more institutions are shifting their emphasis "away from narrow specialization and professional training toward broader educational purposes," increasing the number of general-education courses required for graduation and changing the content of some of them.

"The traditional emphasis on rational thinking is gaining renewed attention today, as opposed to the stress on 'relevance' and 'narcissism' " that characterized higher education in the 1960's, it says. Institutions are also giving "greater attention to the basic skills of writing and mathematics," according to the report, which was released by the Association of American Colleges at a recent conference on general education.

In general education itself, the report says, institutions are moving away from a "smorgasbord" approach and placing greater emphasis on "a limited menu featuring a more balanced meal." The report, which is based on a survey of about 270 colleges and universities that were reviewing or revising their general-education programs, says more than 85 per cent of those institutions now offer "a limited range of courses" for students to meet breadth requirements, while about 55 per cent offer interdisciplinary "core" courses.

About 60 per cent of the four-year institutions allow students to take general-education courses at any time during their undergraduate years, rather than requiring that those courses be introductory.

The study found that more than 75 per cent of the academic administrators and about 70 per cent of the faculty members had developed more favorable attitudes toward general education during the last three years. Students' attitudes did not change.

The report attributes the new outlook of administrators to the fact that they "have an institution-wide view that allows them to become aware of deficiencies, and they are more likely to be connected with the national debate about general education."

The report says the change in faculty attitudes may have come about because faculty members are "front-line observers" who see students' academic inadequacies. The report speculates that faculty members may be doing more undergraduate teaching and may now see a greater need for general education.

It concludes that even with changing attitudes and curricular revisions, "the general-education 'revival' is still in its infancy."

The report, *Reforming General Education: A Survey*, by Jerry G. Gaff and Thomas Klein, is available for $3 prepaid from the Association of American Colleges, 1818 R Street, N.W., Washington 20009.

FACT-FILE

CREF's Investments of Its Faculty Pension Funds

Following is a list of investments of faculty pension funds by the College Retirement Equities Fund, in common stocks and securities convertible into common stocks, showing the number of shares held and the market value at the end of 1980 and 1981 calendar years.

	December 31, 1981		December 31, 1980	
	Shares	Market value	Shares	Market value
Aerospace				
Boeing	685,000	$15,412,500	285,000	$12,575,625
Cessna Aircraft	568,510	12,365,093	868,510	22,364,133
Raytheon	733,510	27,414,936	366,755	40,343,050
Subtotals		**$55,192,529**		**$75,282,808**
Air transport				
Delta Airlines	300,000	$ 7,350,000	150,000	$8,850,000
Northwest Airlines	200,000	5,400,000	200,000	4,750,000
Subtotals		**$12,750,000**		**$13,600,000**
Aluminum and other nonferrous metals				
Alcan Aluminium	2,935,000	$67,505,000	3,006,000	$99,949,500
Aluminum Company of America	1,050,000	26,906,250	525,000	31,303,125
AMAX	215,600	10,187,100	—	—
Dome Mines	100,000	1,525,000	—	—
Inco	716,113	10,204,619	22,800	464,550
Kaiser Aluminum & Chemical	1,875,984	28,608,756	1,875,984	42,678,636
Martin Marietta	900,000	32,400,000	600,000	43,575,000
Newmont Mining	40,000	1,725,000	—	—
Phelps Dodge	122,500	4,119,063	51,200	1,926,400
Phibro	100,000	2,600,000	—	—
Reynolds Metals	856,400	20,553,600	856,400	30,188,100
$4.50 cum. conv. 2nd. pfd. B	21,000	1,050,000	21,000	1,515,948
Subtotals		**$207,384,388**		**$251,601,259**
Banks				
BankAmerica	1,450,000	$ 30,812,500	1,250,000	$37,812,500
Barnett Banks of Florida	28,500	648,375	19,000	560,500
Chase Manhattan	400,000	21,550,000	300,000	14,437,500
Citicorp	2,204,000	55,651,000	2,304,000	55,872,000
Continental Illinois	377,000	12,488,125	377,000	11,781,250
First Chicago	570,000	10,972,500	645,000	10,078,125
First City Bancorporation of Texas	—	—	115,000	6,066,250
Manufacturers Hanover	586,000	20,876,250	641,000	20,992,750
Mercantile Texas	448,971	13,525,279	427,311	15,116,160
J. P. Morgan	255,700	13,743,875	100,000	5,162,500
Northwest Bancorporation	58,000	1,377,500	—	—
Security Pacific	200,000	8,150,000	200,000	6,875,000
Sun Banks of Florida	185,000	3,422,500	185,000	3,098,750
Wells Fargo	762,584	19,445,893	722,400	20,588,400
Subtotals		**$212,663,797**		**$208,441,685**
Beverages				
Anheuser-Busch	85,000	$3,495,625	—	—
Associated Coca-Cola Bottling	141,000	6,803,250	79,300	$ 2,597,075
Coca-Cola	1,906,400	66,247,400	1,906,400	63,626,100
PepsiCo	1,259,278	45,806,237	1,259,278	34,315,326
Hiram Walker Resources	25,000	484,375	—	—
Subtotals		**$122,836,887**		**$100,538,501**
Broadcasting				
ABC	448,600	$15,252,400	430,300	$11,564,312
Capital Cities Communications	146,600	10,811,750	158,000	9,282,500
CBS	584,700	$27,700,163	584,700	27,846,338
Metromedia	70,100	11,216,000	185,000	18,592,500
Taft Broadcasting	200,000	6,550,000	100,000	2,637,500
Subtotals		**$71,530,313**		**$69,923,150**
Business services				
H&R Block	100,000	$3,800,000	100,000	$2,925,000
Computer Sciences	10,000	131,250	—	—
A.T. Cross (Class A)	100,000	5,400,000	100,000	3,550,000
Deluxe Check Printers	200,000	5,625,000	200,000	10,700,000
Kelly Services	100,000	4,400,000	85,500	2,778,750
Parker Pen	200,000	2,850,000	200,000	4,100,000
Purolator	270,000	9,720,000	200,000	6,700,000
Subtotals		**$31,926,250**		**$30,753,750**
Chemicals and textiles				
Allied	490,414	$21,516,914	576,630	$30,849,705
Conv. deb. 7.75%, 6/15/05	$6,000,000*	4,927,500	—	—
American Cyanamid	157,300	4,561,700	—	—
Diamond Shamrock	400,000	10,150,000	87,600	3,098,850
Dow Chemical	1,150,000	30,187,500	405,000	13,010,625
E. I. DuPont de Nemours	1,454,087	54,164,741	1,454,087	61,071,654
W. R. Grace	200,000	9,150,000	—	—
Hercules	1,100,000	24,887,500	1,100,000	20,900,000
International Minerals & Chemical	175,700	5,688,287	175,700	11,508,350
Monsanto	841,800	59,031,225	841,800	57,768,525
PPG Industries	425,000	16,043,750	700,000	28,525,000
Stauffer Chemical	920,000	20,470,000	920,000	21,735,000
Union Carbide	992,944	51,012,498	932,287	46,847,422
Subtotals		**$311,791,815**		**$295,315,131**
Construction and mining equipment				
Caterpillar Tractor	1,702,900	$94,510,950	1,827,800	$106,012,400
Conv. deb. 5.5%, 6/30/00	$6,350,000*	6,921,500	$6,350,000*	7,191,375
Subtotals		**$101,432,450**		**$113,203,775**
Construction materials and homebuilding				
Armstrong World Industries	1,284,500	$21,515,375	1,284,500	$18,304,125
Jim Walter	320,000	6,200,000	320,000	9,600,000
Masco	100,000	3,700,000	—	—
National Gypsum	100,000	2,150,000	—	—
U.S. Home	50,000	687,500	—	—
United States Gypsum	300,000	10,050,000	300,000	9,900,000
Subtotals		**$44,302,875**		**$37,804,125**
Containers				
Ball	74,504	$2,505,197	—	—
Continental Group	905,000	29,638,750	905,000	$29,525,625
Crown Cork & Seal	100,000	3,000,000	100,000	2,837,500
National Can	100,000	2,125,000	—	—
Owens-Illinois	305,000	9,035,625	305,000	7,777,500
Subtotals		**$46,304,572**		**$40,140,625**
Cosmetics				
Avon Products	1,000,000	$30,000,000	1,245,000	$42,485,625
Cheesebrough-Pond's	357,600	12,069,000	348,600	9,804,375
Gillette	277,000	9,348,750	277,000	7,756,000
International Flavors & Fragrances	170,000	3,315,000	170,000	3,867,500
Revlon	102,800	3,148,250	102,800	4,934,400
Conv. deb. 4.75%, 4/15/87	$10,105,000*	8,033,475	$10,105,000)	11,747,062
Revlon International Finance, conv. deb. 4.75%, 6/15/83	$10,995,000*	10,335,300	$10,995,000*	15,310,538
Subtotals		**$76,249,775**		**$95,905,500**
Drugs				
Abbott Laboratories	287,500	$7,762,500	—	—
American Home Products	2,357,000	86,030,500	2,357,000	$66,290,625
American Hospital Supply	100,000	3,837,500	—	—
Baxter Travenol Laboratories	379,000	12,696,500	100,000	5,287,500
Bristol-Myers	485,000	25,765,625	385,000	19,394,375
Foremost-McKesson	213,000	7,827,750	213,000	6,709,500
Hospital Corporation of America	225,900	7,737,075	—	—
Johnson & Johnson	1,597,500	59,307,188	470,500	46,932,375
Eli Lilly	632,000	35,392,000	67,700	4,315,875
Merck	575,000	48,731,250	250,000	21,187,500
Pfizer	428,900	22,838,925	—	—
Richardson-Merrell	—	—	100,000	3,750,000
Schering-Plough	1,200,000	33,600,000	1,000,000	40,500,000
SmithKline	326,500	22,079,562	204,900	16,392,000
Squibb	395,800	12,962,450	150,000	4,425,000
Sterling Drug	100,000	2,225,000	—	—
Upjohn	315,700	16,968,875	165,700	11,184,750
Warner-Lambert	1,400,000	31,150,000	1,100,000	22,137,500
Subtotals		**$436,912,700**		**$268,507,000**
Electrical equipment				
Burndy	610,000	$11,742,500	305,000	$11,933,125
Emerson Electric	810,700	36,785,513	810,700	29,590,550
General Electric	2,857,200	163,931,850	2,857,200	175,003,500
General Signal	50,000	1,931,250	—	—
Gould	1,133,600	25,647,700	1,133,600	28,906,800
International Telephone & Telegraph	2,281,035	67,860,791	2,385,700	71,571,000
$4.00 cum. Conv. pfd. H	—	—	24,200	1,331,000
McGraw-Edison	588,000	21,168,000	788,000	28,368,000
Minnesota Mining & Manufacturing	1,220,000	66,490,000	920,000	54,280,000
Square D	310,300	8,959,912	310,300	8,998,700
Thomas & Betts	267,400	15,509,200	193,000	9,843,000
Westinghouse Electric	340,400	8,680,200	140,400	4,159,350
Subtotals		**$428,706,916**		**$423,985,025**
Electronics				
AMP	300,000	$15,262,500	300,000	$15,562,500
Augat	514,950	13,002,488	343,300	13,989,475
Avnet	8,000	369,000	—	—
AVX	48,500	672,937	100,000	3,050,000
General Instrument	73,000	3,230,250	—	—
Harris	100,000	4,112,500	—	—
Intel	918,750	20,671,875	968,750	38,992,188
M/A-COM	200,000	5,050,000	—	—
Motorola	150,000	8,662,500	100,000	7,300,000
National Semiconductor	515,850	9,865,631	515,850	20,762,962
Plantronics	300,000	4,875,000	300,000	6,525,000
ROLM	121,800	3,897,600	121,800	5,694,150
Texas Instruments	224,000	18,032,000	224,000	27,048,000
Subtotals		**$107,704,281**		**$138,924,275**
Food and related products				
Archer Daniels Midland	100,000	$ 1,925,000	—	—
Beatrice Foods	1,116,700	20,100,600	494,300	$9,515,275
Beatrice Foods Overseas Finance, N.V. Conv. deb. 6.25%, 8/01/91	$400,000*	$341,000	$400,000*	333,000
N.V. conv. deb. 7.25%, 11/01/90	$1,150,000*	1,127,000	$1,150,000*	1,224,750
Consolidated Foods	617,300	19,444,950	444,000	10,656,000
Dart & Kraft	914,800	46,426,100	914,800	39,793,800
Food and related products (Continued)				
General Foods	911,100	$28,927,425	765,000	$23,141,250
General Mills	100,000	3,587,500	—	—
Hershey Foods	50,000	1,800,000	—	—
Kellogg	331,200	7,452,000	331,200	6,706,800
Nabisco Brands	25,000	778,125	—	—
Pillsbury	55,000	2,179,375	—	—
Quaker Oats	212,600	7,600,450	6,500	198,250
Ralston Purina	1,132,000	13,584,000	1,132,000	11,886,000
Subtotals		**$156,273,525**		**$103,455,125**
Food stores				
Albertson's	588,600	$15,597,900	588,600	$11,919,150
American Stores	181,000	5,339,500	181,000	3,868,875
Circle K	100,000	1,175,000	—	—
Dillon	503,848	11,273,599	484,526	7,449,587
Great Atlantic & Pacific Tea	816,000	3,162,000	816,000	4,284,000
Jewel	200,000	7,575,000	355,600	12,179,300
Kroger	1,056,700	27,474,200	1,056,700	22,983,225
Lucky Stores	780,147	10,239,429	780,147	11,799,724
National Convenience Stores	—	—	105,000	1,102,500
Safeway Stores	456,500	12,097,250	456,500	13,923,250
Southland	394,664	12,530,582	561,064	11,501,812
Conv. deb. 5%, 7/15/87	$1,805,000*	1,624,500	—	—
Subtotals		**$108,088,960**		**$101,011,423**
Forest products				
Boise Cascade	262,700	$ 8,997,475	262,700	$ 8,964,638
Champion International	473,700	9,355,575	348,300	8,533,350
$4.60 cum. Conv. pfd. C	38,500	1,554,438	—	—
Evans Products	38,246	669,305	219,100	4,464,162
Georgia-Pacific	180,000	3,622,500	—	—
Trus Joist	31,000	620,000	—	—
Weyerhaeuser	210,700	6,110,300	—	—
Subtotals		**$30,929,593**		**$21,962,150**
Hotels and restaurants				
Church's Fried Chicken	164,900	$ 4,761,488	—	—
Hilton Hotels	35,000	1,330,000	—	—
Host International	48,000	1,368,000	—	—
McDonald's	835,000	54,588,125	1,000,000	$48,750,000
Subtotals		**$62,047,613**		**$48,750,000**
Household goods				
Maytag	155,200	$ 3,957,600	200,000	$ 4,850,000
RCA	2,762,600	50,417,450	3,314,900	97,375,188
Singer	455,000	6,313,125	755,000	9,060,000
Whirlpool	1,550,000	39,331,250	1,550,000	29,837,500
White Consolidated Industries	400,000	10,900,000	400,000	9,750,000
Subtotals		**$110,919,425**		**$150,872,688**
Household products				
Colgate-Palmolive	1,317,000	$ 22,059,750	1,317,000	$ 19,261,125
Procter & Gamble	877,200	70,504,950	877,200	60,417,150
Purex Industries	350,000	8,443,750	550,000	8,250,000
Unilever N.V.	450,000	26,775,000	450,000	26,156,250
Subtotals		**$127,783,450**		**$114,084,525**
Instruments				
Beckman Instruments	400,000	$ 18,400,000	425,000	$ 15,671,875
John Fluke Manufacturing	50,000	962,500	—	—
GenRad	200,000	2,775,000	200,000	4,800,000
Hewlett-Packard	1,451,200	57,503,800	925,600	82,841,200
Perkin-Elmer	100,000	2,700,000	—	—
Spectra-Physics	22,300	473,875	—	—
Tektronix	450,000	24,750,000	450,000	27,506,250
Teradyne	88,700	3,104,500	88,700	4,290,862
Subtotals		**$110,669,675**		**$135,110,187**
Insurance				
Aetna Life & Casualty	1,799,950	$ 79,197,800	2,209,950	$ 78,176,981
Alexander & Alexander Services	200,000	5,100,000	100,000	3,400,000
American Express	375,000	16,546,875	375,000	15,093,750
American International Group	389,999	25,252,435	260,000	19,500,000
Chubb	100,000	4,600,000	100,000	3,950,000
Continental	2,340,000	61,717,500	2,340,000	56,452,500
Corroon & Black	250,000	5,312,500	100,000	2,187,500
Frank B. Hall	200,000	5,975,000	200,000	4,750,000
INA	826,523	36,470,327	826,523	33,474,182
Fred S. James & Co.	169,200	3,933,900	100,000	2,400,000
Marsh & McLennan	103,480	3,414,840	3,480	119,625
Mission Insurance Group	150,000	5,381,250	150,000	5,062,500
Rollins Burdick Hunter	108,500	2,332,750	45,000	967,500
St. Paul	632,000	30,889,000	792,000	30,690,000
Southland Financial	550,000	11,137,500	600,000	8,475,000
Transamerica	425,000	9,934,375	225,000	4,218,750
Travelers	2,068,680	90,763,335	2,068,680	80,419,935
U.S. Fidelity & Guaranty	311,500	12,888,313	311,500	13,199,812
Subtotals		**$410,847,700**		**$362,538,035**
Leisure-time industry				
Briggs & Stratton	300,000	$ 7,125,000	300,000	$ 6,900,000
Walt Disney Productions	900,000	47,025,000	1,000,000	51,250,000
MCA	200,000	8,275,000	—	—
Warner Communications	841,266	46,164,472	533,133	41,384,449

* Par value

in Common Stocks and Securities, 1980 and 1981

	December 31, 1981		December 31, 1980	
	Shares	Market value	Shares	Market value
Leisure-time industry (Continued)				
Warner Communications Warrants	19,325	$ 381,669	—	—
Subtotals		$108,971,141		$99,534,449
Machinery–farm, industrial, and related industry				
AMSTED Industries	406,000	$ 14,260,750	406,000	$ 17,508,750
Browning-Ferris Industries	100,000	3,212,500	100,000	2,350,000
Clark Equipment	489,000	13,203,000	489,000	15,648,000
Deere	900,091	31,953,231	900,091	43,204,368
FMC	547,200	14,022,000	595,800	18,171,900
$2.25 cum. conv. pfd.	38,900	1,235,075	—	—
Hyster	134,000	4,740,250	134,000	6,197,500
Ingersoll-Rand	68,000	3,842,000	68,000	5,091,500
Omark Industries	300,000	5,625,000	35,600	916,700
Signode	212,700	7,670,600	212,700	7,923,075
Teledyne	100,000	13,850,000	—	—
Trans Union	—	—	200,000	10,650,000
Unimation	19,600	392,000	—	—
Subtotals		$114,006,406		$127,661,793
Motor vehicles, equipment, and tires				
Bandag	273,000	$ 6,859,125	273,000	$ 5,767,125
Bendix	73	4,289	170,000	10,030,000
$4.04 cum. Conv. pfd. B	30,400	1,470,600	—	—
Cummins Engine	321,500	11,413,250	400,000	12,100,000
Dana	200,000	5,900,000	200,000	4,275,000
Eaton	777,200	24,773,250	777,200	22,150,200
Firestone Tire & Rubber	859,800	10,854,975	1,482,000	15,561,000
Ford Motor	1,972,250	33,035,187	1,972,250	39,445,000
General Motors	4,101,000	157,888,500	4,201,000	189,045,000
General Tire & Rubber	100,000	2,150,000	204,000	3,825,000
Goodyear Tire & Rubber	1,425,000	27,075,000	1,625,000	26,000,000
Stanadyne	100,000	3,875,000	78,000	2,281,500
Sun Electric	109,900	1,346,275	—	—
Subtotals		$286,645,451		$330,479,825
Multi-industry				
Colt Industries	180,000	$ 10,080,000	200,000	$ 9,050,000
Lear Seigler	100,000	2,900,000	—	—
Litton Industries	241,842	13,633,843	—	—
Ogden	162,100	4,234,863	—	—
Overseas Shipholding Group	250,000	4,062,500	—	—
Penn Central	602,300	24,844,875	600,000	22,950,000
Rockwell International	870,100	28,495,775	870,100	39,154,500
Signal	150,000	3,806,250	—	—
Tyco Laboratories	213,300	2,639,587	—	—
United Technologies	299,800	12,516,650	319,200	19,471,200
$3.875 cum. Conv. pfd. C	39,500	2,054,000	24,000	1,824,000
Subtotals		$109,258,343		$92,449,700
Newspapers				
Dow Jones	287,200	$14,216,400	235,600	$14,371,600
Gannett	675,000	24,384,375	450,000	24,750,000
Knight-Ridder Newspapers	100,000	3,025,000	100,000	2,787,500
Times Mirror	680,000	31,110,000	830,000	34,445,000
Subtotals		$72,735,775		$76,354,100
Office machines				
Amdahl	37,000	$ 1,091,500	—	—
Apple Computer	150,000	3,318,750	—	—
Automatic Data Processing	718,200	18,044,775	465,100	$ 23,022,450
Burroughs	751,200	25,540,800	551,200	29,695,900
CADO Systems	180,000	2,655,000	120,000	4,500,000
CPT	131,000	2,358,000	—	—
Cray Research	69,000	2,518,500	69,000	3,346,500
Data General	349,800	18,801,750	489,700	32,258,987
Datapoint	150,000	7,687,500	—	—
Digital Equipment	654,800	56,640,200	654,800	62,206,000
Dorado Micro Systems	50,000	600,000	—	—
Electronic Data Systems	—	—	331,200	10,805,400
Honeywell	100,000	6,987,500	—	—
International Business Machines	5,695,700	323,942,938	5,695,700	386,595,636
NCR	531,100	23,169,237	606,100	45,457,500
Pansophic Systems	158,200	1,779,750	—	—
Prime Computer	270,000	6,378,750	270,000	11,137,500
Sperry	410,309	14,463,392	368,378	23,377,643
Conv. deb. 4.25% 2/15/88	—	—	$1,250,000*	1,475,000
Storage Technology	150,000	5,250,000	—	—
Tandem Computers	200,000	5,550,000	50,000	3,800,000
Triad Systems	30,000	975,000	—	—
Tymshare	157,200	4,499,850	57,200	2,781,350
Wang Laboratories, Class B	473,000	15,727,250	434,000	17,794,000
Xerox	930,000	37,665,000	630,000	37,721,250
Subtotals		$585,645,442		$695,975,118
Paper products				
Crown Zellerbach	820,000	$ 23,780,000	943,500	$ 45,759,750
Great Northern Nekoosa	108,000	3,969,000	108,000	4,198,500
International Paper	2,119,914	82,941,635	2,369,914	99,536,388
James River	92,700	1,830,825	61,800	1,444,575
Mead	200,000	4,600,000	—	—
St. Regis Paper	1,357,900	42,773,850	1,557,900	53,747,550
Union Camp	1,009,000	50,071,625	1,209,000	60,903,375
Westvaco	614,250	14,511,656	409,500	14,434,875
Subtotals		$224,478,591		$280,025,013
Petroleum–domestic				
Ashland Oil	100,000	$ 3,125,000	100,000	$ 4,062,500
Atlantic Richfield	1,599,600	74,981,250	780,600	49,665,675
Cities Service	550,000	25,300,000	100,000	4,775,000
Conoco	—	—	1,187,700	77,645,887
Getty Oil	543,300	35,110,763	100,000	9,187,500
Mountain Fuel Supply	100,200	3,206,400	100,200	4,784,550
Phillips Petroleum	1,565,000	63,382,500	1,465,000	86,068,750
Shell Oil	2,103,000	92,532,000	1,753,000	102,112,250
Standard Oil of Indiana	2,305,000	119,860,000	1,600,000	127,800,000
Standard Oil of Ohio	1,020,000	42,330,000	120,000	8,640,000
Sun	850,000	38,675,000	147,000	7,166,250
Superior Oil	895,000	33,003,125	—	—
Union Oil of California	905,000	34,050,625	—	—
Subtotals		$565,556,663		$481,908,362
Petroleum–international				
British Petroleum ADR	179,600	$ 4,265,500	79,600	$ 3,124,300
Exxon	8,770,000	274,062,500	4,385,000	353,540,625
Gulf Oil	2,883,400	102,000,275	2,883,400	125,427,900
Mobil	3,100,000	74,787,500	1,450,000	117,087,500
Royal Dutch Petroleum				
10 fl. ord. shs.	3,322,400	115,868,700	—	—
20 fl. ord. shs.	—	—	1,661,200	161,967,000
Standard Oil of California	2,243,800	96,202,925	1,121,900	111,629,050
Texaco	2,650,000	87,450,000	2,650,000	127,200,000
Subtotals		$754,637,400		$999,976,375
Petroleum services				
Baker International	362,900	$ 13,790,200	—	—
Dresser Industries	477,000	15,860,250	—	—
Fluor	200,000	6,000,000	—	—
Halliburton	800,000	41,700,000	800,000	$ 66,800,000
Hughes Tool	295,000	11,836,875	—	—
McDermott	400,000	15,200,000	300,000	12,300,000
NL Industries	300,000	11,925,000	—	—
Schlumberger	3,250,012	181,594,420	2,166,675	253,500,975
SEDCO	825,000	30,525,000	412,500	37,898,437
Subtotals		$328,431,745		$370,499,412
Photographic equipment				
Eastman Kodak	1,500,000	$106,687,500	1,500,000	$104,625,000
Subtotals		$106,687,500		$104,625,000
Publishing				
American Greetings Class A	—	—	163,000	$ 1,874,500
Dun & Bradstreet	352,300	$22,194,900	352,300	20,081,100
McGraw-Hill	585,000	30,273,750	585,000	27,056,250
Time	591,212	22,613,859	314,200	19,676,775
$4.50 cum. conv. pfd. C	168,100	11,010,550	—	—
$1.575 cum. conv. pfd. B	—	—	209,800	9,336,100
Subtotals		$86,093,059		$78,024,725
Railroads				
CSX	566,620	$ 32,863,960	566,620	$ 27,056,105
Missouri Pacific	451,300	37,006,600	451,300	46,258,250
Norfolk & Western Railway	358,700	18,607,562	358,700	14,617,025
Santa Fe Industries	102,000	2,154,750	34,000	3,485,000
Southern Pacific	390,900	15,929,175	390,900	15,978,038
Southern Railway	177,983	16,952,881	169,027	13,606,673
Union Pacific	210,000	10,920,000	200,000	15,750,000
Subtotals		$134,434,928		$136,751,091
Retail trade				
Allied Stores	500,000	$ 13,062,500	355,300	$ 7,416,887
Best Products	227,500	4,151,875	227,500	4,464,688
Dayton Hudson	700,000	21,000,000	350,000	15,312,500
Denny's	—	—	100,000	1,900,000
Jack Eckerd	99,600	2,427,750	66,400	2,191,200
Federated Department Stores	122,500	4,413,600	—	—
Gordon Jewelry Class A	311,650	5,298,050	191,100	3,654,788
K Mart	696,900	10,976,175	200,000	3,575,000
Longs Drug Stores	200,000	5,775,000	300,000	9,450,000
R. H. Macy	252,023	13,357,219	381,157	16,199,172
May Department Stores	200,000	5,000,000	200,000	5,300,000
Modern Merchandising	252,600	2,368,125	252,600	2,462,850
J. C. Penney	100,000	2,862,500	—	—
Sears, Roebuck	1,132,000	18,253,500	632,000	9,638,000
Service Merchandise	151,000	1,774,250	151,000	1,585,500
Tandy	386,500	13,044,375	—	—
Subtotals		$123,764,919		$83,150,585
Savings & Loan				
H. F. Ahmanson	425,000	$ 6,428,125	250,000	$ 4,875,000
Beneficial	200,000	4,025,000	—	—
Federal National Mortgage Association	350,400	2,978,400	350,400	4,161,000
Financial Corporation of America	150,000	3,450,000	—	—
Great Western Financial	575,000	8,337,500	375,000	6,984,375
Subtotals		$ 25,219,025		$16,020,375
Steel				
Bethlehem Steel	570,000	$ 13,252,500	570,000	$ 15,033,750
Inland Steel	306,000	7,152,750	306,000	8,529,750
National Steel	300,000	6,937,500	—	—
Republic Steel	150,000	3,675,000	150,000	3,543,750
United States Steel	1,000,000	29,875,000	1,000,000	24,750,000
Worthington Industries	200,000	4,400,000	200,000	3,950,000
Subtotals		$65,292,750		$55,807,250
Tobacco				
American Brands	139,400	$ 5,122,950	—	—
Philip Morris	700,000	34,125,000	—	—
R. J. Reynolds	571,700	26,941,363	—	—
Subtotal		$66,189,313		
Trucking and related industries				
Consolidated Freightways	521,500	$20,599,250	521,500	$12,776,750
Leaseway Transportation	587,500	15,495,312	587,500	17,331,250
RLC	324,400	3,933,350	300,000	4,950,000
Ryder System	747,048	21,944,535	822,377	22,306,976
Yellow Freight System	125,500	1,976,625	300,500	4,657,750
Subtotals		$63,949,072		$62,022,726
Utilities–electric				
Allegheny Power System	600,000	$ 9,675,000	—	—
American Electric Power	776,426	12,616,923	—	—
Arizona Public Service	450,000	8,718,750	550,000	$ 9,693,750
Carolina Power & Light	293,073	5,934,728	258,397	4,683,446
Central & South West	700,000	9,712,500	—	—
Cincinnati Gas & Electric	235,100	3,702,825	235,100	3,585,275
Cleveland Electric Illuminating	750,000	12,000,000	775,000	11,334,375
Commonwealth Edison	818,022	16,258,187	—	—
Consumers Power	1,870,000	32,023,750	1,770,000	29,426,250
Detroit Edison	1,168,127	13,287,451	866,719	9,425,573
Duke Power	850,000	17,531,250	550,000	9,968,750
Florida Power & Light	236,435	6,945,278	211,497	5,525,359
Illinois Power	112,627	2,322,932	98,302	1,757,148
Middle South Utilities	2,132,004	26,916,551	1,766,202	20,311,323
Niagara Mohawk Power	400,000	4,950,000	—	—
Ohio Edison	761,285	8,849,938	—	—
Pacific Gas & Electric	1,110,000	23,310,000	610,000	12,505,000
Pennsylvania Power & Light	200,000	3,425,000	—	—
Philadelphia Electric	400,000	5,450,000	—	—
Public Service of Indiana	100,000	2,025,000	—	—
Public Service Electric & Gas	996,086	17,965,548	463,538	7,880,146
Southern California Edison	1,162,165	33,412,244	1,030,929	26,417,555
Southern	1,863,346	22,360,152	214,332	2,625,567
Texas Utilities	407,250	7,992,281	—	—
Virginia Electric and Power	200,000	2, 350,000	—	—
Subtotals		$309,736,288		$155,139,517
Utilities–gas and pipeline				
American Natural Resources	514,135	$ 21,593,670	565,000	$ 27,826,250
Consolidated Natural Gas	400,000	20,300,000	400,000	22,300,000
El Paso	100,000	2,487,500	—	—
ENSERCH	50,000	1,262,500	—	—
Midcon	216,792	5,961,780	—	—
Pacific Gas Transmission	100,000	2,837,500	—	—
Panhandle Eastern	935,451	34,377,824	884,610	$39,696,874
Peoples Energy	216,792	1,734,336	200,589	10,154,818
Tenneco	900,000	30,150,000	800,000	41,300,000
Texas Eastern	289,300	15,188,250	289,300	22,927,025
Texas Gas Transmission	600,000	21,000,000	600,000	24,525,000
Texas Oil & Gas	375,000	13,125,000	—	—
United Energy Resources	982,200	40,515,750	982,200	47,022,825
Valero Energy	100,000	2,287,500	—	—
Subtotals		$212,821,810		$235,752,792
Utilities–telephone				
American Telephone & Telegraph	7,280,543	$ 427,731,954	6,848,481	$327,871,028
Bell Canada	1,635,417	26,779,955	1,639,356	27,459,217
Central Telephone & Utilities	301,000	9,970,625	433,000	10,608,500
Continental Telephone	2,221,891	37,494,427	2,570,134	40,479,626
General Telephone & Electronics	2,050,100	65,603,200	2,500,100	68,127,725
United Telecommunications	1,457,970	31,710,863	1,851,913	31,945,512
Subtotals		$599,291,024		$506,491,508
Foreign investments, by country				
Australia	—	$ 34,463,044	—	$ 31,897,094
Belgium	—	8,432,138	—	4,966,812
Canada	—	43,723,559	—	8,545,271
France	—	23,227,963	—	21,678,286
Hong Kong	—	19,495,173	—	14,198,137
Japan	—	236,834,277	—	150,325,130
Mexico	—	2,386,875	—	—
Netherlands	—	15,474,713	—	9,603,515
Singapore	—	15,074,905	—	6,280,111
Spain	—	10,503,779	—	6,238,401
Sweden	—	9,068,495	—	4,682,753
Switzerland	—	28,155,666	—	20,563,987
United Kingdom	—	97,136,490	—	77,741,925
West Germany	—	39,606,690	—	31,137,712
Subtotals		$583,583,767		$387,859,134
Total market value		$8,911,689,501		$8,578,219,892

SOURCE: COLLEGE RETIREMENT EQUITIES FUND

Wyngaarden, New NIH Director

Continued from Page 13

leges and a friend of Dr. Wyngaarden's for the past 10 years. "I think he understands the problems and is a strong advocate of biomedical research.

"It was very reassuring to me that the Administration looked for the best man, regardless of what his political viewpoints were."

"What I particularly admire about him is how he can retain his humor under a considerable amount of stress," says Ewald W. Busse, dean of Duke University's medical school. "I'm sure that will show quickly in his new position."

Although he plans to make no immediate policy changes, Dr. Wyngaarden has already shown that he is not merely a mouthpiece for the Reagan Administration.

For example, in response to questions, he candidly told reporters last week that he personally supported a woman's right to have an abortion, although President Reagan has backed legislation limiting federal assistance for such operations.

'Test Tube' Fertilization

However, the Secretary of the Department of Health and Human Services, Richard S. Schweiker, said in a statement that Dr. Wyngaarden had said he would support the Administration's position on abortion.

"He has also told me that his personal views on this issue will not influence his performance as director of N.I.H.," said Secretary Schweiker, a strong opponent of abortion.

Dr. Wyngaarden also said he supported research on in-vitro or "test tube" fertilization, because it "is a legitimate area for biomedical research." The institutes now support such research using animals, but Dr. Wyngaarden said he "would have no problem with carrying this forward to the human level."

In nearly all other matters, however, he strongly supports the Reagan Administration, even on issues that are likely to make him unpopular among university administrators.

One issue is Mr. Reagan's proposal to reduce administrative-cost payments to universities in fiscal 1983. Under the President's proposed 1983 budget for N.I.H., the agency would receive an increase of only 3 per cent, far less than the rate of inflation. Thus, Dr. Wyngaarden said, the reduction in payments for indirect costs is necessary to maintain an adequate level of new research awards and traineeships, to continue to attract scientists and physicians to careers in biomedical research.

The Reagan Administration has proposed to reduce by 10 per cent next year the amount of indirect costs—such as administrative expenses—for which it will reimburse universities that conduct research. Indirect-cost payments to institutions now account for about 30 per cent of the money spent for N.I.H. research.

The White House has also proposed to cut in half the payments institutions receive when they enroll students with N.I.H.-supported biomedical-research traineeships.

With the money saved by those reductions, the agency can support 4,100 new research grants and 8,900 traineeships, Dr. Wyngaarden said. Without them, he said, only "about 3,100 or 3,200" new research awards could be supported.

The reductions will place financially hard-pressed universities "in a very difficult spot," he acknowledged.

But he said the agency's highest priority would be to emphasize support for biomedical-research grants. "I think that's the bedrock on which the whole system rests and thrives."

Dr. Wyngaarden said that if the N.I.H. budget were increased, he hoped to raise the number of new research grants to 5,000, the level Dr. Fredrickson had maintained while director of the agency.

He added that his second priority was to support the greatest possible number of biomedical traineeships, which a National Academy of Sciences panel recommended setting at 10,750 annually. The N.I.H. is currently supporting about 9,750 traineeships, he said.

5 Directors Needed

One of Dr. Wyngaarden's first duties will be to find directors for 5 of the 11 institutes, which are now being run by acting directors. He said he had scheduled interviews for those posts in May and June.

He must also fill other key positions at the institutes, including that of director of the National Institute on Aging, whose present director plans to leave this summer.

Dr. Fredrickson, the former N.I.H. director, has known Dr. Wyngaarden since both attended the University of Michigan medical school. (Dr. Wyngaarden graduated one year after Dr. Fredrickson). He has worked with the new N.I.H. director in editing five editions of *The Metabolic Basis of Inherited Disease*, a textbook. The latest edition was published this year.

Dr. Fredrickson said in a recent interview that looking back at the N.I.H. directorship, "I realize how extraordinarily important the job is to maintaining the quality of university research."

Dr. Wyngaarden "is vigorous and has had lots of administrative experience," he added. "My expectation is that he will pick up the numerous administrative duties that he needs to learn quickly."

Dr. Wyngaarden has said he plans to investigate alternatives to the proposed 10-per-cent reduction in support for indirect costs.

"I think there will be another very careful look at all of the components of the indirect cost [reimbursement procedure] in order to arrive at a perhaps more uniform way of doing it," he said last week. Now, universities calculate the costs in many different ways.

Scientific Fraud

Dr. Wyngaarden hinted that one option could involve limits on the amount universities charge the agency for laboratory space and administration, since each of these categories accounts for nearly one-third of the total indirect costs.

In other areas, he said that institutions should be the first to investigate instances of scientific fraud by their researchers, and that N.I.H. should be notified of the allegations if the work is supported by the agency. A newly formed committee of N.I.H. officials is studying how institutions should deal with instances of such fraud.

Proposals in Congress to create new institutes at the N.I.H., Dr. Wyngaarden said, are "illogical," because they would reduce the limited money available for the existing institutes.

Similarly, Congressional measures that would set aside a percentage of the agency's budget for small-business innovation, he said, would decrease the money available to other researchers.

In January, the N.I.H. lifted its rules barring profit-making organizations from competing for research awards. "I think it would be sounder to let that system operate and see whether some of these problems may not be solved by simply opening the doors to applicants from small businesses," he said.

Washington Notes

▪ Hatch Withdraws Bill to Narrow Title IX

Sen. Orrin G. Hatch, Republican of Utah and chairman of the Senate Labor and Human Resources Committee, says he is withdrawing a bill, S 1361, that would narrow the coverage of Title IX of the Education Amendments of 1972. The law bars sex discrimination in federally assisted education programs or activities.

Senator Hatch has sent letters to women's groups in Utah saying that since he introduced his bill he has "become more acutely aware of the gains across a wide front which have been made for women in Utah because of Title IX."

S 1361 would have limited the application of Title IX only to educational programs receiving direct federal aid, and would have stipulated that only students—not employees—of schools and colleges were covered. Title IX's ban on sex bias in admissions would have applied only to students entering federally assisted programs.

Added Senator Hatch, who is running for re-election this fall: "While I continue to feel that Title IX, as enacted, is not perfect and can be improved, since reviewing the progress made because of Title IX, and the rational way it has been administered in Utah in the past few years, I am withdrawing my amendment."

He said, though, that he would "monitor the situation carefully and consider other improvements if they become necessary."

▪ House Committee Approves $200-a-Month GI Bill

The House Armed Services Committee approved a GI Bill last week that would provide education benefits of $200 a month for up to 36 months for military personnel who have served at least three years on active duty.

The measure, HR 1400, also would give members of the Reserves and the National Guard benefits of $140 a month for 36 months after completion of a six-year enlistment.

The House Veterans Affairs Committee, which also has jurisdiction over such legislation, last year passed a version of the bill that would have provided $300 a month for those who served on active duty for three years, but the measure was never voted on by the full House.

▪ Alcohol and Drug Programs Approved by Senate Panel

The Senate Labor and Human Resources Committee has approved a bill, S 2365, that would extend the research programs of the National Institute on Alcohol Abuse and Alcoholism and of the National Institute on Drug Abuse for fiscal years 1983 and 1984.

Before ordering the measure reported to the full Senate, the panel approved an amendment that would raise authorized spending for the alcohol agency's programs to $32.9-million for both years, up from the $28.1-million expected to be spent this year. Maximum spending for the drug-abuse institute would be set at $46.6-million for fiscal 1983 and 1984, up from $39.8-million this year.

The House Subcommittee on Health and Environment has approved a somewhat more generous bill, HR 6338, that would provide $33-million in fiscal 1983 and $50-million in 1984 for alcohol research, and $47-million in 1983 and $53-million in 1984 for research on drug abuse.

▪ Native American Arts Institute Wins Senate Approval

The Senate has passed a bill, S 792, that would establish an independent Institute of Native American Culture and Arts Development. The institute, which would have a budget of $4-million a year, is designed to preserve Native American art and to support research and scholarship in the field.

People

Benny Andrews, assistant professor of art at Queens College of the City University of New York, has been named director of the visual-arts program at the National Endowment for the Arts.

Ruth Berenson, a contributing editor of *National Review* magazine, has been named associate deputy chairman for programs at the National Endowment for the Arts.

Steven M. Cahn, acting director for humanities at the Rockefeller Foundation, has been named director of the division of general programs at the National Endowment for the Humanities.

Tony E. Gallegos, former manager of equal-opportunity programs at the Douglas Aircraft Corporation in Los Angeles, has been confirmed by the Senate as a member of the Equal Employment Opportunity Commission.

Anne Krueger, professor of economics at the University of Minnesota, has been named a vice-president of the World Bank.

Jeffrey M. Mandell, former counsel to the Presidential Task Force on the Arts and Humanities, has been named general counsel at the National Endowment for the Arts.

Caroline L. McMullen, program officer at the John M. Olin Foundation, has been named special assistant to the chairman of the National Endowment for the Arts.

Kate L. Moore, executive assistant to the chairman of the National Endowment for the Arts, has been named director of the agency's Office of Policy, Planning, and Research.

M. Joan Parent, first vice-president of the National School Boards Association, has been named to the National Science Board's Commission on Precollege Education in Mathematics, Science, and Technology.

Joseph E. Rowe, vice-president for technology at the Harris Corporation (Melbourne, Fla.) has been named to the National Science Board's Commission on Precollege Education in Mathematics, Science, and Technology.

Hugh Southern, executive director of the Theatre Development Fund, has been named deputy chairman for programs at the National Endowment for the Arts.

Ana Steele, special assistant to the chairman of the National Endowment for the Arts, has been named associate deputy chairman for programs.

Clarence Thomas, director of the Office for Civil Rights in the Department of Education, has been confirmed by the Senate as chairman of the Equal Employment Opportunity Commission.

Black Colleges to Receive Increased Federal Aid

WASHINGTON

Although cuts in federal support for higher education have been threatened this year, historically black colleges are due to receive a slight raise, according to the Department of Education.

The Reagan Administration's first annual report on the government's efforts to strengthen its assistance to black colleges shows an increase of 0.4 per cent, from $544.8-million in fiscal 1981 to an estimated $546.9-million in fiscal 1982, which ends September 30.

The report is the result of a survey of the 27 departments and agencies that support most of the government's higher-education programs and about 98 per cent of the federal programs for black colleges, according to a spokesman for the Education Department.

Total spending on higher education by those 27 agencies in fiscal 1982 is expected to decline by 4.4 per cent, from $10.1-billion to $9.6-billion, according to the report.

The projected increase in support for black colleges is attributed to an executive order signed by President Reagan last fall calling for "significant increases in the participation of historically black colleges and universities in federally sponsored programs."

The report was completed last month by the Department of Education, which is charged with coordinating the so-called White House Initiative on Historically Black Colleges, and was submitted to President Reagan's Cabinet Council on Human Resources. Black-college presidents were to give the council their comments on the plan last week.

Figures in the final report—which shows the 0.4-per-cent increase in federal funds to black colleges in fiscal 1982—have changed significantly since the first draft, which was prepared in March. According to that draft, the colleges were to receive a 13.8-per-cent reduction; a later draft showed a 0.4-per-cent reduction.

An Education Department spokesman explained that the first draft contained numerous inaccuracies. He said the second was more accurate, but that the "top-level officials in some agencies had not given the matter the attention merited by the President's mandate."

While several agencies were persuaded to include more money in their budgets for black colleges, the final report notes that others have still not assigned "adequate administrative personnel for the effective implementation of the executive order."

Noting that seven agencies reported decreases in financing to black colleges, the report recommends that President Reagan "reiterate the serious intent of his mandate, and, to the extent permissible by law, require a renewed effort" by those agencies to find ways to increase support for the black colleges.

—LORENZO MIDDLETON

Changes in Funds by Department and Agency

	Fiscal 1981 actual	Fiscal 1982 estimated	Change
Departments			
Agriculture	$ 34,036,000	$ 38,320,000	+ 13%
Commerce	354,000	323,000	− 9%
Defense	6,189,000	6,688,000	+ 8%
Education	416,920,000	424,138,000	+ 2%
Energy	2,790,000	1,707,000	− 39%
Health and Human Services	62,191,000	52,270,000	− 17%
Housing and Urban Development	375,000	771,000	+106%
Justice	142,000	250,000	+ 76%
Labor	6,482,000	3,273,000	− 50%
Transportation	712,000	1,839,000	+158%
Treasury	0	200,000	
Agencies			
Agency for International Development	1,435,000	4,000,000	+179%
Appalachian Regional Commission	124,000	189,000	+ 52%
Central Intelligence Agency	192,000	363,000	+ 89%
Environmental Protection Agency	1,114,000	1,124,000	†
International Communication Agency	412,000	415,000	†
National Science Foundation	4,490,000	3,230,000	− 28%
Nuclear Regulatory Commission	88,000	84,000	− 5%
Small Business Administration	375,000	400,000	+ 7%
Veterans Administration	305,000	1,259,000	+320%

† Increase of less than 1%

Note: The Departments of Interior and State, and the National Aeronautics and Space Administration reported no change in support for fiscal 1982.

SOURCE: DEPARTMENT OF EDUCATION

C2175-1

o Colleges Top $4-Billion—Pages 6 and 7

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News Summary

Articles on inside pages

Corporations give more to colleges and universities than to any other kind of organization, according to a report from the Council on Foundations. Story on Page 7.

The quality of education offered by U.S. colleges and universities remains high despite the uncertain economic climate of the 1980's. Part III of the Minter-Bowen series appears on Page 8.

At Dartmouth College, a conservative student-run newspaper has drawn fire once again for its publication of allegedly racist and sexist articles. Story on Page 3.

Greater cooperation between colleges and secondary schools has been suggested as one cure for students' "illiteracy" in science and mathematics. Story on Page 11.

A Senate committee has recommended that no cutbacks be made in the federal student-loan program in this fiscal year. Story on Page 13.

Male students who fail to register for the draft would be barred from receiving federal student aid under a bill approved by the Senate. Story on Page 13.

Federal education officials repeatedly failed to respond to recommendations made by an advisory committee on black colleges, members of the group have charged. Story on Page 19.

Internment orders issued against Warsaw University faculty members and administrators figure in a struggle taking place within Poland's Communist Party. Story on Page 21.

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Supreme Court Rules Title IX Bars Sex Bias Against College Workers as Well as Students

But its decision limits the government's authority to programs that receive U.S. support

By CHERYL M. FIELDS

WASHINGTON

Title IX of the Education Amendments of 1972 bars sex bias against employees of educational institutions as well as against students, the Supreme Court ruled last week.

The 6-to-3 decision means that schools and colleges can lose their federal funds if they are found guilty of discriminating against their employees on the basis of sex.

Women's-rights advocates said it also should prompt the Office for Civil Rights in the Department of Education to resume processing complaints of sex discrimination, filed by employees of schools and colleges, that have been "on hold" while the Court considered the issue.

A spokesman for the department said last week that officials were studying the decision and that it was "too early" to say what the effects would be.

Excerpts from the majority and dissenting opinions in the Supreme Court's decision on Title IX appear on Pages 14 through 17.

The decision upholds federal regulations that apply Title IX to employment, but it also says that the rules—and the government's authority to cut off a college's funds—must be limited to programs or activities that receive federal aid.

Title IX says, "No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving federal financial assistance."

The Court's majority opinion, written by Justice Harry A. Blackmun, says the act's "broad directive that 'no person' may be discriminated against on the basis of gender appears, on its face, to include employees as well as students." However, the

Continued on Page 14, Column 1

Academic Geography: Few Students, Closed Departments, Fuzzy Image

By MALCOLM G. SCULLY

Academic geography has become a beleaguered discipline.

The University of Michigan has decided to eliminate its geography department entirely, and the dean of arts and sciences at the University of Pittsburgh has called for closing the department of geography there. Departments elsewhere are reportedly high on "hit lists" for retrenchment.

Undergraduate enrollment in geography, which reached a high of about 789,000 in 1972-73, fell to 690,000 by 1980-81—a drop of 12.5 per cent.

Only 410 colleges and universities have geography departments. Such major institutions as Brown, Cornell, Duke, Harvard, Princeton, Stanford, Vanderbilt, and Yale do not.

"About 50 per cent of all U.S. colleges offer geography courses, and the majority of those offer only one or two courses with only one or two geography faculty members," says Salvatore J. Natoli, director of educational affairs at the Association of American Geographers.

Vulnerable to the Budget Cutters

The lack of size and a corresponding lack of clout, geographers say, have made the discipline especially vulnerable to university budget cutters looking for politically safe ways to reduce spending.

"Geography's greatest danger is that it is a relatively small discipline, in comparison with other units in the university," Mr. Natoli says.

In addition, the discipline itself appears to outsiders—and to some insiders, as well—to have become a loosely joined group of specialties that have little in common.

They range from such technical areas as computer mapping and remote sensing—the study of the earth's surface through satellite imagery—to environmental science, regional planning, and the study of urban transit systems.

There are physical geographers and cultural geographers, urban geographers and

Continued on Page 12, Column 1

Harvard's Derek C. Bok

In New Book, Derek Bok Outlines Social Obligations of Universities

CAMBRIDGE, MASS.

When Harvard University is confronted with a politically or morally sensitive issue, President Derek C. Bok prefers to work out the problem in writing before delivering an opinion.

For someone "whose mind has been deformed by a legal education," he said in an interview the other day, the process can be very useful.

"If you don't try to work out something on paper, you are in very great danger of coming out with a lot of *ad hoc* decisions which become increasingly inconsistent, awkward, and hard to justify," he said. "If you do work it out on paper, it's a wonderful discipline for making sure you have thought through the subject as a whole."

Mr. Bok began working it out on paper at Harvard in a series of open letters on such potentially divisive issues as whether the university should take official positions on social and political questions or continue investments in companies doing business in South Africa.

He has continued and expanded that process in *Beyond the Ivory Tower: Social Responsibilities of the Modern University*, published this week by the Harvard University Press.

The book, he said, "is really about the

Continued on Page 24, Column 1

FACT-FILE

College and University Fund-Raising, 1950-1981, Compared with Prices, Spending, Enrollment

Academic years	Total enrollment	Consumer Price Index*	Higher Education Price Index*	Institutional expenditures			Estimated voluntary support			
				Total	Per student		Total	Per student		Share of total
					Current	Adjusted†		Current	Adjusted†	
1949-50	2,659,000	71.7	n.a.	$ 2,500,000,000	$ 940	$1,310	$ 240,000,000	$ 90	$126	9.6%
1965-66	5,967,000	95.9	95.0	15,200,000,000	2,547	2,656	1,440,000,000	241	251	9.5%
1970-71	8,649,000	118.8	128.6	27,100,000,000	3,133	2,637	1,860,000,000	215	181	6.9%
1975-76	11,291,000	165.9	177.2	42,700,000,000	3,780	2,280	2,410,000,000	213	128	5.6%
1980-81	12,097,000	259.6	261.7	68,000,000,000	5,621	2,165	4,230,000,000	350	135	6.2%
Average annual change										
1949-50 to 1965-66	+5.2%	+1.8%	n.a.	+11.9%	+ 6.4%	+ 4.5%	+11.9%	+ 6.4%	+ 4.4%	
1965-66 to 1970-71	+7.7%	+4.4%	+6.2%	+12.3%	+ 4.2%	− 0.1%	+ 5.3%	− 2.3%	− 6.3%	
1970-71 to 1975-76	+5.4%	+6.9%	+6.6%	+ 9.5%	+ 3.8%	− 2.9%	+ 5.3%	− 0.2%	− 6.7%	
1975-76 to 1980-81	+1.4%	+9.4%	+8.1%	+ 9.8%	+ 8.3%	− 1.0%	+11.9%	+10.4%	+ 1.7%	

* 1967 = 100

Voluntary Support for Higher Education, 1980-1981

	74 private universities	67 private women's colleges	389 private coeducational institutions	45 professional and specialized schools	580 private 4-year institutions	168 public 4-year institutions	41 2-year institutions	Total for 789 institutions
Volume of support								
Current operations	$721,492,000	$53,773,000	$341,552,000	$58,615,000	$1,180,684,000	$584,907,000	$7,494,000	$1,773,085,000
1-year change	+19.1%	+13.4%	+13.7%	+ 6.4%	+16.4%	+14.4%	+12.0%	+15.7%
Capital	$572,245,000	$58,564,000	$386,485,000	$44,972,000	$1,071,694,000	$257,793,000	$9,060,000	$1,338,548,000
1-year change	− 4.1%	+26.5%	+14.2%	−16.6%	+ 2.8%	+21.2%	+65.5%	+ 6.1%
Total	$1,293,737,000	$112,338,000	$728,037,000	$103,586,000	$2,252,378,000	$842,700,000	$16,555,000	$3,111,633,000
1-year change	+ 7.6%	+19.9%	+13.9%	− 4.9%	+ 9.4%	+16.4%	+36.1%	+11.4%
Sources of support								
Alumni	$361,884,000	$51,421,000	$210,650,000	$ 9,424,000	$638,687,000	$160,554,000	$1,442,000	$800,682,000
1-year change	+21.0%	+18.0%	+25.5%	+ 0.8%	+21.7%	+14.6%	+18.3%	+20.2%
Nonalumni	$307,283,000	$21,956,000	$199,389,000	$24,930,000	$558,825,000	$157,168,000	$7,360,000	$723,353,000
1-year change	+31.9%	+27.0%	+ 5.0%	−33.3%	+16.0%	+23.3%	+73.0%	+17.9%
Foundations	$303,759,000	$20,821,000	$135,403,000	$41,058,000	$503,385,000	$173,813,000	$2,067,000	$679,265,000
1-year change	−22.2%	+16.4%	+23.9%	+ 7.1%	− 9.7%	+25.0%	+35.8%	− 2.7%
Business corporations	$229,585,000	$ 9,066,000	$ 81,453,000	$15,374,000	$336,485,000	$238,492,000	$3,326,000	$578,303,000
1-year change	+18.6%	− 1.2%	− 8.7%	+19.7%	+10.0%	+19.9%	− 4.8%	+13.8%
Religious denominations	$ 19,336,000	$ 5,055,000	$ 64,092,000	$ 7,599,000	$96,313,000	$1,088,000	$1,708,000	$99,110,000
1-year change	−18.8%	+ 3.4%	+ 3.7%	+14.3%	− 2.0%	+464.6%	+26.3%	− 0.7%
Others	$ 71,890,000	$ 4,018,000	$ 37,049,000	$ 5,201,000	$118,683,000	$111,585,000	$652,000	$230,920,000
1-year change	+14.7%	+356.3%	+77.8%	+18.2%	+33.4%	− 5.7%	+99.0%	+11.2%
Purposes								
Unrestricted	$363,365,000	$51,763,000	$344,896,000	$37,334,000	$802,583,000	$113,448,000	$8,131,000	$924,162,000
1-year change	−11.3%	+11.1%	+ 9.6%	−11.2%	− 1.9%	+21.3%	+48.0%	+ 0.7%
Physical plant	$205,622,000	$22,527,000	$153,823,000	$14,009,000	$401,590,000	$99,569,000	$4,262,000	$505,442,000
1-year change	+20.4%	+38.0%	+14.3%	−43.5%	+14.4%	+12.3%	+ 2.9%	+13.8%
Basic research	$184,464,000	$ 1,814,000	$ 6,822,000	$29,313,000	$222,445,000	$243,846,000	$3,000	$466,295,000
1-year change	+ 2.9%	−22.2%	+29.8%	+91.3%	+10.0%	+11.1%	−82.2%	+10.6%
Student financial aid	$145,124,000	$12,274,000	$85,179,000	$ 7,524,000	$252,007,000	$137,249,000	$2,567,000	$391,824,000
1-year change	+ 14.0%	+ 5.5%	+17.7%	−32.2%	+12.5%	+ 6.4%	+71.4%	+10.6%
Faculty compensation	$115,436,000	$ 9,900,000	$ 31,264,000	$ 8,102,000	$165,137,000	$41,797,000	$367,000	$207,301,000
1-year change	+16.6%	+44.6%	+35.0%	+ 3.6%	+20.4%	+21.4%	+423.4%	+20.7%
Others	$279,727,000	$14,059,000	$106,051,000	$ 7,304,000	$408,615,000	$206,791,000	$1,204,000	$616,611,000
1-year change	+29.3%	+41.2%	+19.1%	− 6.9%	+26.0%	+30.0%	+30.4%	+27.3%

Support from Annual Funds, Parents, Matching Gifts, 1980-1981

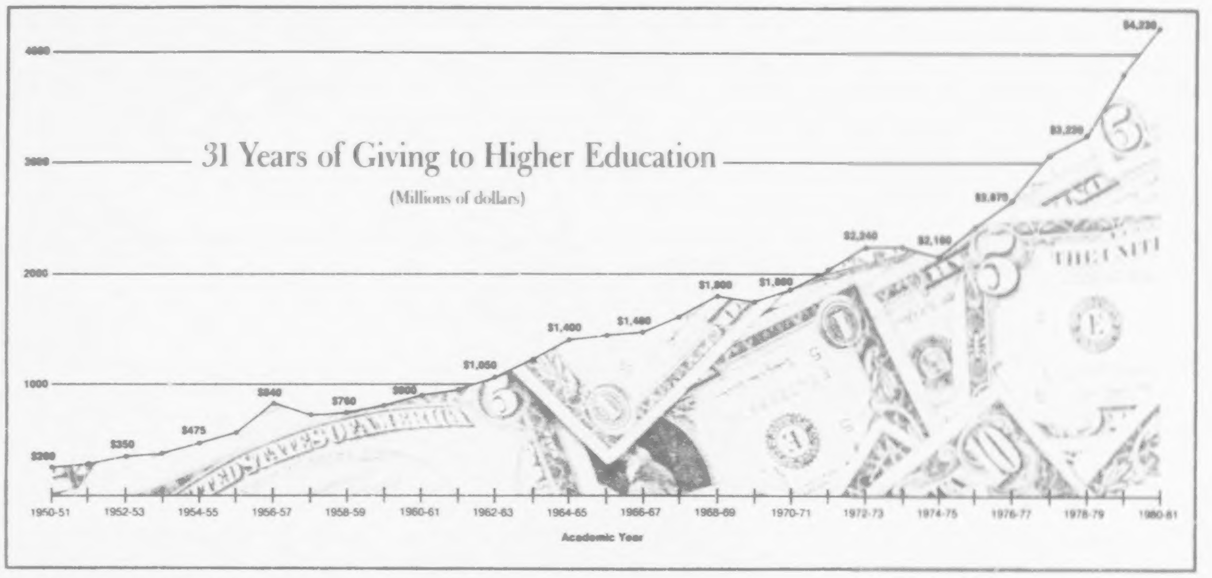
	75 private universities	73 private women's colleges	440 private coeducational institutions	62 professional and specialized schools	Private 4-year institutions	209 public 4-year institutions	64 2-year institutions	Total for 928 institutions
Support through the annual fund								
Total alumni of record	4,786,570	667,780	4,449,536	435,878	n.a.	10,227,854	313,674	20,945,207
Alumni solicited for annual fund	3,961,476	591,249	3,772,615	379,329	n.a.	8,081,074	216,391	17,045,561
Alumni donors to annual fund	954,372	191,261	883,029	69,430	n.a.	1,040,049	24,233	3,177,233
Alumni gifts to annual fund	$126,758,000	$21,890,000	$81,963,000	$5,744,000	n.a.	$72,586,000	$1,179,000	$311,859,000
Nonalumni parents' gifts to annual fund	$4,477,000	$2,074,000	$9,477,000	$242,000	n.a.	$974,000	$391,000	$17,847,000
Total gifts to annual fund	$201,638,000	$40,550,000	$234,708,000	$20,070,000	n.a.	$151,891,000	$5,041,000	$658,229,000
Corporations' matching gifts								
Total number of gifts matched	75,238	13,286	80,764	7,503	n.a.	52,873	1,312	233,280
Support from matching-gift programs	$18,264,000	$2,619,000	$15,824,000	$1,574,000	n.a.	$9,098,000	$266,000	$48,200,000

n.a.—not available

SOURCE: COUNCIL FOR FINANCIAL AID TO EDUCATION

Gifts to Colleges Reach $4.2-Billion

Alumni, foundations, and corporations contribute record amounts, but 11.3-pct. increase in year fails to match inflation



CHRONICLE CHART BY PETER H. STAFFORD

COUNCIL FOR FINANCIAL AID TO EDUCATION

NEW YORK

Voluntary support for higher education rose by an estimated 11.3 per cent in 1980-81 to a total of $4.2-billion, the Council for Financial Aid to Education is announcing here this week.

Alumni, alumnae, other individuals, foundations, and business corporations all gave record amounts to colleges and universities.

Even so, the increase was not quite enough to keep up with inflation and enrollment growth.

The council's estimates are based on its latest yearly survey, which gathered data from 928 private and public colleges and universities.

Total voluntary support covered an estimated 6.2 per cent of college and university spending, compared with 6.4 per cent the previous year.

The council estimated that voluntary support for higher education in 1980-81 amounted to $350 per student, up from $325 the year before. After the amount per student is adjusted for inflation, however, it falls below the previous year's average.

Using the Consumer Price Index's inflation rate of 11.6 per cent for the year, the adjusted figure for 1980-81 would be $314.

The Higher Education Price Index, designed by D. Kent Halstead of the National Institute of Education to measure prices specifically affecting higher education, indicated an inflation rate of 9.8 per cent for the year, the council said. Using the Halstead rate would make the adjusted support per student $319.

Giving by alumni exceeded the billion-dollar mark for the first time, as did the total for donations by other individuals.

Alumni increased their total giving by 15.3 per cent to an estimated $1.049-billion. Nonalumni increased theirs by 18.9 per cent, to $1.007-billion.

Based on the experience of the institutions participating in the C.F.A.E. survey, fewer than one-sixth of the alumni gave money to their institutions in 1980-81. Among those who did, the average gift was $98.15.

Foundations increased their support of higher education by 2.1 per cent, to $922-million, according to the council's estimates. That increase would have been 15.5 per cent if the previous year's total had not been swollen by a gift of $105-million given to Emory University by the Emily and Ernest Woodruff Fund.

Businesses gave 11.8 per cent more than in the previous year, for a total of $778-million, the council estimated.

A decline in support for higher education was shown for religious denominations—down 9.7 per cent from the previous year, to a total of $140-million. That followed a decrease of 3.7 per cent in giving by religious denominations in 1979-80.

Over the five years ending in 1980-81, the council said, contributions from business corporations more than doubled. The 105.3-per-cent increase compared with increases of 68 to 78 per cent for other sectors—except religious denominations, which raised their support only 7.7 per cent in the five years.

Over all, voluntary support during the five years went up by 76 per cent. During the same five years, the council said, the Consumer Price Index rose 56 per cent; personal income after taxes, 67 per cent; corporate profits, 59 per cent; the gross national product, 70 per cent.

The C.F.A.E. survey is cosponsored by the Council for Advancement and Support of Education and by the National Association of Independent Schools. Copies of the survey report, *Voluntary Support of Education 1980-81*, are available for $15 each from C.F.A.E., 680 Fifth Avenue, New York 10019. —JACK MAGARRELL

The Top 20

Institutions reporting the highest totals of voluntary support in 1980-81:

1. Harvard U.	$90,968,738
2. Stanford U.	79,462,853
3. Yale U.	58,304,711
4. U. of Southern California	55,234,810
5. Cornell U.	54,575,318
6. U. of Minnesota	49,829,866
7. U. of Pennsylvania	48,930,359
8. Columbia U.	48,444,576
9. Mass. Inst. of Technology	47,540,361
10. Johns Hopkins U.	46,849,517
11. Dartmouth College	42,487,408
12. U. of Chicago	39,241,134
13. Duke U.	36,713,979
14. Texas A&M U.	35,714,920
15. Princeton U.	35,335,965
16. Yeshiva U.	34,306,665
17. U. of Illinois	34,283,060
18. U. of Cal. at Los Angeles	34,080,324
19. U. of Wis. at Madison	33,585,367
20. Northwestern U.	33,092,725
Multiple-unit systems not included above:	
U. of California	$97,770,325
U. of Texas	76,723,422

Corporate Chiefs Favor Giving to Higher Education, Survey Finds

By **JACK MAGARRELL**

WASHINGTON

The chief executive officers of U.S. companies—who dominate decisions on what charities their corporations will support—favor giving to higher education.

Corporations give more and larger gifts to colleges and universities than to any other kind of organization, according to a survey conducted for the Council on Foundations by Yankelovich, Skelly and White of New York.

Results of the survey were released last week.

"Corporate giving is an expression of enlightened self-interest," the report of the survey says.

Chief executive officers of 219 corporations with annual sales of $25-million or more were interviewed in December, January, and February.

84 Pct. Give to Education

The survey found that 47 per cent of the corporations gave their largest gifts to education. In contrast, only 18 per cent gave their largest gifts to health organizations, 15 per cent to arts and culture organizations, and 12 per cent to social-welfare organizations.

Gifts to higher education were made by 84 per cent of the corporations; to arts and culture by 70 per cent; to health organizations by 67 per cent; and to social-welfare organizations by 62 per cent.

"The factors underlying education's large share," the report says, "are illustrative of the motives and character of corporate giving.

"A corporation can only benefit from good relationships with the academic community.

"Universities train the talent that many corporations hope to recruit, and house a segment of the public whose general approval is important for the functioning of business.

"Supplementing these self-interested objectives is the fact that corporations have substantial competence to evaluate educational institutions and projects—and certainly more competence than they generally have to evaluate, say, a social-welfare project.

"Finally, contributions to education are typically noncontroversial and—most often mentioned—prominent corporate citizens were once students of recipient schools."

The report adds that higher education's large share of corporate gifts is related to "the sophisticated mechanisms that universities have developed to solicit support."

Giving by corporations with yearly sales exceeding $100-million averages 1.1 per cent of their pretax net income, according to the report. For corporations with sales of $50-million to $100-million, the average is 1.3 per cent, and for those with sales of $25-million to $50-million, 1.7 per cent.

Increased Giving Planned

About 60 per cent of the corporations studied plan to increase their charitable contributions—beyond the inflation rate—during the next few years, the report says.

About a third of the corporations expect to maintain their present level of giving, and virtually none expect to give less in the years ahead.

The chief executive officer dominates a corporation's decisions about charitable giving, the report says, while groups outside the corporation have relatively little influence.

The respondents told interviewers that future pressures on corporations from outsiders would have negligible impact on their giving.

U.S. Cuts Said to Cost Colleges $6.5-Billion

WASHINGTON

Higher education will lose $6.5-billion because of reductions in federal spending projected for fiscal years 1981 through 1984, according to estimates by Independent Sector, an association of foundations, corporations, and nonprofit organizations.

Independent Sector estimated that for nonprofit organizations the Reagan Administration's budget reductions—from the fiscal 1980 level—would come to $25.5-billion over the four-year period, with education accounting for a fourth of the total. Social-welfare organizations would be hit hardest, absorbing 50 per cent of the total reductions.

In general, says Independent Sector, the organizations least able to survive or respond to the budget reductions are those most dependent on the government funds being reduced, those least able to compete for block grants and other remaining government funds, those least experienced in fund raising, and those that are the least popular.

Copies of the report, *Analysis of the Economic Recovery Program's Direct Significance for Philanthropic and Voluntary Organizations and the People They Serve*, are available for $10 each ($5 for members) from Independent Sector, 1828 L Street, N.W., Washington 20036. —J.M.

THE MINTER-BOWEN REPORT, PART III

Assessing Their Institutions, College Presidents Express 'Extraordinarily High' Levels of Confidence

By **W. JOHN MINTER**
and **HOWARD R. BOWEN**

Higher education in 1981-82 may be close to the brink but it is not yet there.

In reviewing responses about the learning environment in the sample of institutions participating in our survey, we have found that:

▶ The faculties are strong—with some qualification.

▶ The quality of instructional methods and programs is high.

▶ The curricula are expanding, with increasing emphasis on vocational subjects and with only scattered evidence (up to 1981-82) of retrenchment of programs.

▶ Student services are expanding.

We also found that presidents' assessments of the academic condition and the student services at their institutions were quite favorable, and the level of confidence high.

Only a handful of presidents reported that their institutions were losing ground.

One may explain the expansion of curricula and student services as *aggressive* moves in the competitive struggle for students; yet the overall situation as reflected in the data presented here suggests that the long-awaited disaster has not yet arrived.

This third part of our report describes recent trends in the learning environment at American colleges and universities, with special emphasis on trends that might indicate significant retrenchment in the quantity or quality of the education delivered.

Obviously, quality of education is hard to judge, let alone measure. Yet through numerous questions directed to institutional officers we gained some sense of what has happened to the learning environment at our sample of institutions.

The data refer to changes over the past two academic years, 1980-81 and 1981-82.

Faculty

The majority of the chief academic officers and chief student-affairs officers believe the qualifications and performance of the faculty are either holding steady or improving.

The favorable reports are plausible because of the unique conditions in the faculty labor market over the last two decades.

In the late 1950's, the 1960's, and the early 1970's, great numbers of gifted young people were choosing the academic profession. As they emerged from the graduate schools, they got jobs at leading colleges and universities throughout the country.

By the early 1980's, these people were at the prime of life and had become the cream of the professoriate.

In the late 1970's and up until the present, many of the same kinds of people were still coming out of the graduate schools, but the academic labor market had deteriorated. Many of them were forced to seek jobs at second-tier institutions. The result was that those institutions were able to employ people of a quality that had not been available to them before.

Thus, on the whole, the quality of the faculty members now at the nation's colleges and universities is probably as high as it has ever been. How many of those people the institutions will be able to hold to retirement, and whether they will be able to replace them with equally gifted people, remains to be seen.

The data reveal that judgments about the quality of the faculty members are decidedly more favorable at private institutions than at public institutions. This is true consistently for every characteristic included in the faculty section of the table below.

Moreover, the only negative trend consensus pertained to "commitment to the institution" as reported in the public sector. Those figures suggest that faculty conditions there are a bit less satisfactory than in the private sector.

Another striking feature of the data is that the trend consensus relating to "competence of new faculty" is much stronger than the corresponding figures on "quality of overall faculty performance."

Instruction: Methods and Quality

The responses of the chief academic officers and chief student-affairs officers regarding modes of instruction are shown in the table.

How Academic and Student-Affairs Officers Evaluate Quality at Their Institutions

Faculty members	Increase	No change	Decrease	Trend consensus *
Percentage of faculty members with Ph.D. or equivalent				
Public institutions	43%	49%	3%	+40%
Private institutions	55%	40%	0%	+55%
Concern for teaching				
Public institutions	25%	61%	6%	+19%
Private institutions	37%	58%	2%	+35%
Concern for advising students				
Public institutions	36%	45%	14%	+22%
Private institutions	58%	35%	5%	+53%
Productivity in research and scholarship				
Public institutions	15%	63%	8%	+ 7%
Private institutions	23%	69%	2%	+21%
Willingness to innovate				
Public institutions	23%	56%	15%	+ 8%
Private institutions	30%	56%	10%	+20%
Commitment to institution				
Public institutions	17%	52%	25%	− 8%
Private institutions	30%	51%	15%	+15%
Competence of new faculty members				
Public institutions	47%	40%	5%	+42%
Private institutions	61%	32%	3%	+58%
Quality of overall faculty performance				
Public institutions	26%	61%	7%	+19%
Private institutions	42%	51%	2%	+40%
Instruction				
Laboratory and studio instruction				
Public institutions	19%	70%	4%	+15%
Private institutions	26%	66%	1%	+25%
Traditional independent study				
Public institutions	16%	67%	7%	+ 9%
Private institutions	27%	63%	4%	+23%
Nontraditional independent study				
Public institutions	29%	57%	8%	+21%
Private institutions	29%	58%	8%	+21%
Experiential learning				
Public institutions	41%	49%	3%	+38%
Private institutions	47%	47%	1%	+46%
Innovative teaching methods				
Public institutions	56%	36%	3%	+53%
Private institutions	51%	40%	3%	+48%
Rigor of assessing student performance				
Public institutions	35%	54%	4%	+31%
Private institutions	36%	55%	3%	+33%
Rigor of academic standards				
Public institutions	32%	57%	6%	+26%
Private institutions	30%	60%	4%	+26%
Overall quality of learning environment				
Public institutions	46%	43%	6%	+40%
Private institutions	44%	50%	1%	+43%
Average class size				
Public institutions	47%	43%	5%	+42%
Private institutions	27%	56%	13%	+14%
Percentage of classes taught by full-time faculty members				
Public institutions	19%	53%	22%	− 3%
Private institutions	19%	56%	19%	0%
Change in number of courses				
From 1979-80 to 1980-81				
Public institutions	58%	27%	9%	+49%
Private institutions	42%	44%	8%	+34%
From 1980-81 to 1981-82				
Public institutions	49%	28%	17%	+32%
Private institutions	38%	43%	12%	+26%

* Percentage reporting increase minus percentage reporting decrease.

SOURCE: W. JOHN MINTER AND HOWARD R. BOWEN

The responses are very similar to those received in previous years.

They suggest that higher education—especially in the private sector—is moving toward individualized teaching through the increasing use of laboratories, studio instruction, and traditional independent study.

They indicate that colleges and universities in both sectors are rapidly adopting nontraditional forms of teaching.

And they also unmistakably convey the respondents' belief that the rigor and quality of education are increasing.

From the data, one would not suspect that the higher-education system under observation was financially hard pressed.

In a previous report, when reviewing similar information, we asked ourselves, Could it be that the financial squeeze is less severe than often alleged? We might have asked also, Is there any connection, at least in the short run, between the level of funding and the quality of education? Or, we might have added, are our respondents susceptible to self-delusion?

Two other questions on methods and quality of instruction, which pertained to average class size and use of part-time faculty members, produced somewhat different answers.

The data indicate that class size has been increasing, especially at public institutions. On the other hand, they suggest that the use of part-time faculty members is not changing much over all, although it is gaining in some institutions and decreasing in others.

Another instructional matter of some importance is the proliferation of courses that appears to have taken place from 1979-80 to 1980-81.

Data on course offerings were derived from lists of courses offered in the fall of each of the two years at 370 colleges and universities. The resulting data were presented in detail in the June 1, 1981, issue of *The Chronicle*. They revealed increases in numbers of courses in almost all fields, the growth being especially pronounced in vocational subjects and remedial work.

In the recent survey, the institutions were asked about changes in the numbers of undergraduate courses and sections.

The responses confirm that the number of courses has increased at many institutions and that relatively few institutions have cut back their offerings. However, the percentage of institutions curtailing their offerings was greater in 1981-82 than in 1980-81, and that may represent a turning point.

The data for graduate course offerings show a similar trend toward more courses.

In our previous surveys we also found an expansion of course offerings when we had expected to find a consolidation. Apparently, the competition for students has persuaded or forced colleges and universities to offer a greater variety of courses in a wider range of academic fields.

It is hard to reconcile those trends with the reported increase in average class size. We suspect that the situation was mixed—

Continued on Page 10, Column 1

The Minter-Bowen Report: Presidents Express Confidence

Continued from Page 8

that financial pressure may have forced some institutions, or parts of institutions, to increase class size, or to employ relatively more part-time faculty members, or to enlarge the curriculum, or to do some of all three. Not all institutions deal with adversity in the same way.

Student Services

We asked our respondents about trends relating to student services: availability, frequency of use, and quality. The responses indicated that much expansion and development are going on in this area.

The greatest activity is in career counseling, career replacement, programs for women, and programs for minority groups—in that order. But the number of institutions reporting growth exceeded those reporting decline in all other areas, including psychological counseling and health services.

It appears that multiplication of student services, like increasing the number of courses, is a common institutional device for coping with financial stringency.

The emphasis in curricular development on vocational subjects is matched by the emphasis in student services on careers. The recent history of higher education has been dominated by the vocational interests of students. If anything, the vocational emphasis has been greater at private than at public institutions. The private sector, however, appears to give greater emphasis to psychological counseling and health services and less to programs for minorities than does the public sector.

Presidents' Assessments

One of the most interesting and informative parts of our survey includes the responses of the presidents of the sample institutions concerning progress with respect to academic condition, quality of student services, and financial condition. The responses are available for a period of years by types of institution.

As we have reviewed the responses, we have come to believe that they are among the more reliable indicators of the true condition of higher education. The table on this page summarizes the presidents' assessments of academic condition and student services as reported in 1980-81.

The most notable features of the data are, first, the tiny percentage of presidents who believe their institutions are "losing ground" with respect to academic condition or student services and, second, the substantially greater confidence in the private than in the public sector.

In the public sector, the level of confidence was relatively high at research and doctorate-granting universities and relatively low at two-year colleges. At private institutions, the situation was mixed.

Regarding academic condition, confidence was highest at the comprehensive institutions and lowest at the two-year colleges. Regarding student services, it was highest at comprehensive institutions and less selective liberal-arts colleges and lowest at research and doctorate-granting universities.

But the differences in detail do not alter the fact that the level of confidence was extraordinarily high throughout. These are not the responses of a group of fearful men and women experiencing disaster.

We have collected the presidents' responses on a comparable basis for several years, and it is interesting to observe the changes, which are shown in the table below. The figures do not reveal a clear trend, but it is noteworthy that the figures for 1980-81 are down from a previous high.

Consensus on increase in quality ‡

	Academic condition	Student services
Private institutions		
1974-75	70%	49%
1975-76	56%	48%
1976-77	66%	33%
1977-78	65%	64%
1979-80	78%	62%
1980-81	60%	62%
Public institutions		
1979-80	46%	38%
1980-81	37%	28%

‡ Trend consensus derived from percentage of presidents who reported their institutions were gaining ground minus the percentage reporting they were losing ground.

How Presidents of Colleges and Universities Evaluate the Quality of Their Institutions

Academic condition	Gaining ground	Holding our own	Losing ground	Trend consensus *
Public institutions				
Research and Ph.D.-granting universities	72%	22%	6%	+66%
Comprehensive institutions	57%	34%	9%	+48%
2-year colleges	41%	46%	13%	+28%
All types combined	48%	41%	11%	+37%
Private institutions				
Research and Ph.D.-granting universities	56%	44%	0%	+56%
Comprehensive institutions	77%	23%	0%	+77%
Selective liberal-arts colleges	77%	21%	0%	+77%
Less selective liberal-arts colleges	63%	33%	3%	+60%
2-year colleges	43%	57%	0%	+43%
All types combined	62%	36%	2%	+60%
Quality of student services				
Public institutions				
Research and Ph.D.-granting universities	56%	33%	11%	+45%
Comprehensive institutions	46%	40%	13%	+33%
2-year colleges	37%	50%	13%	+24%
All types combined	41%	46%	13%	+28%
Private institutions				
Research and Ph.D.-granting universities	50%	50%	0%	+50%
Comprehensive institutions	66%	32%	2%	+64%
Selective liberal-arts colleges	53%	44%	0%	+53%
Less selective liberal-arts colleges	70%	27%	3%	+67%
2-year colleges	57%	43%	0%	+57%
All types combined	63%	34%	2%	+61%

* Percentage gaining ground minus percentage losing ground

SOURCE: W. JOHN MINTER AND HOWARD R. BOWEN

Next: Financial Analysis

This is the third of a four-part series by W. John Minter and Howard R. Bowen on trends in American higher education. Part IV will present a financial analysis and the authors' conclusions.

Mr. Minter is a higher-education consultant in Boulder, Colo., and Mr. Bowen is professor of economics and education at the Claremont Graduate School.

This Minter-Bowen report continues, in a new format, a series of six studies published over the period 1975 to 1980.

Their previous reports were: *Private Higher Education*, published by the Association of American Colleges in 1975, 1976, and 1977; *Independent Higher Education*, published by the National Association of Independent Colleges and Universities in 1978 and by the National Institute of Independent Colleges and Universities in 1980; and *Preserving America's Investment in Human Capital*, published in 1980 by the American Association of Community and Junior Colleges, the American Association of State Colleges and Universities, and the National Assocation of State Universities and Land-Grant Colleges.

A Note on Methodology

The basic procedure of the Minter-Bowen study was to ask several people at each sample institution whether there had been an increase, decrease, or no change in various aspects of the institution's operations.

For example, chief academic officers and chief student-affairs officers were asked whether there had been an increase, decrease, or no change in the proportion of faculty members with the Ph.D. or equivalent. (See table, Page 8.)

The responses were recorded as simple percentages of the total number of respondents.

In addition to those simple percentages, however, another number is shown in the right-hand column of the table and labeled "Trend Consensus."

This number expresses the *prevalence* of change reported by the respondents over the past two years. To wit:

Each trend consensus is computed simply by subtracting the percentage of respondents reporting "decrease" from those reporting "increase."

The difference, which may have a positive or negative sign, indicates the way the trend is running and the degree of change.

A large positive number indicates that many more respondents are reporting increases than are reporting decreases and that the trend is strong and positive.

A large negative result indicates the opposite—a strong but negative trend.

Small numbers indicate a weak trend, which can result from about equal percentages of respondents reporting increases or decreases or from most repondents reporting no change.

The sign and size of the trend-consensus index thus indicate both the direction and force of a trend, with each respondent given equal weight.

A great many questions were asked in the hope that a general sense of the progress and problems of the institutions would emerge.

In addition, some broad general questions were directed to presidents. The results, with comments, are included in the text.

Fairer Tests for Handicapped People Sought by National Research Council

WASHINGTON

Current provisions for making standardized tests fair to handicapped people are insufficient and do not adequately meet federal requirements designed to prevent discrimination, a panel sponsored by the National Research Council said last week.

The group recommended that colleges and universities ask test producers to devote more effort to creating modified forms of the tests for handicapped people and to devise a means of matching scores on the modified tests with scores on regular editions.

The recommendations are included in a report prepared by the Panel on Testing of Handicapped People. The panel was established by the council's Committee on Ability Testing at the request of the Department of Education's Office for Civil Rights, which is charged with enforcing laws—specifically Section 504 of the Rehabilitation Act of 1973—intended to protect the handicapped from discrimination in programs that receive federal funds.

'Flagging Tests'

The panel examined the testing of people with visual, hearing, and motor impairments, learning disabilities, and mild mental retardation. It reviewed testing for employment as well as various types of standardized tests required for admission to undergraduate and graduate programs.

A major concern in the panel's report is the practice of "flagging" tests that have been modified to meet the needs of the handicapped, whether by the elimination of some items—such as cartography questions that a blind person could not be expected to answer—or by allowing someone extra time to complete the test because a slower medium is being used to compensate for his handicap.

Reading a test question in Braille, for example, takes longer than reading a standard printed version.

Testing agencies, the report says, do not know what effect such modifications may have on the validity of test scores. To prevent admissions officers from viewing the scores on modified tests as equivalent to scores on regular versions, the former are "flagged."

Sometimes that works to the benefit of the person being considered, because the admissions officer will give the application special consideration, the panel said. But it might also hurt a candidate's chances if he has not already made his handicap known to the institution.

The panel said it would be extremely difficult to devise tests to measure precisely the same qualities—and thus produce equivalent scores—for handicapped and nonhandicapped people.

It recommended instead that testing agencies study the "predictive validity" of tests for both groups and develop equations to match test results on that basis and produce a common scale. Predictive validity measures how well a student's test score forecasts his performance in a particular program.

The panel said it hoped the research necessary to create such a scale could be completed within four years. In the meantime, it said, handicapped people should themselves be able to choose whether their score reports should be flagged.

The panel's report also discusses the legal ramifications of O.C.R. regulations designed to enforce Section 504, as well as other topics. Entitled *Ability Testing of Handicapped People: Dilemma for Government, Science, and the Public*, it is available for $13.50 from the National Academy Press, 2101 Constitution Avenue, N.W., Washington 20418.

—LAWRENCE BIEMILLER

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News Summary

Articles on inside pages

It's no company union, but the Professional Staff Congress of the City University of New York manages to maintain a cooperative relationship with the university administration. Story on Page 6.

A dispute in the Chicano-studies department at California State University at Los Angeles has given rise to a growing number of violent incidents. Story on Page 8.

The University of Chicago should not cut back its graduate programs in the face of shrinking enrollment, a faculty panel has recommended. Story on Page 8.

In the 1980's, higher education will be vulnerable to the triple threat of a depressed economy, lower public appropriations, and a smaller pool of 18-year-olds. Part IV of the Minter-Bowen series appears on Page 9.

"Bear" Bryant, of the University of Alabama, is better paid than any other coach in college football. Story on Page 13.

A proposal to trim $665-million from the student-loan program over the next three years was among more than 70 budget alternatives debated by the House of Representatives last week. Story on Page 15.

The Supreme Court has taken action on three more cases involving sex discrimination in education. Story on Page 15.

Archibald MacLeish, the poet and dramatist who died on April 20, may be the subject of renewed critical interest. Story on Page 21.

A black political prisoner in South Africa is one of three candidates for the chancellorship of the predominantly white University of the Witwatersrand. Story on Page 19.

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AAUP's Dilemma: Can Rules on Dismissals of Professors Survive Fiscal Distress?

Layoffs of tenured faculty members may be at once 'unthinkable' and 'inevitable'

By ROBERT L. JACOBSON

WASHINGTON

Pressure is developing in the American Association of University Professors for a new look at its longstanding edict against the dismissal of tenured faculty members.

Discussions on the subject reflect virtually no support for the elimination or weakening of tenure itself or its role in protecting academic freedom. But there is growing sentiment for examining whether the association's ground rules on dismissals are entirely appropriate or adequate in the face of higher education's deepening financial problems.

Even some staunch supporters of academic freedom and tenure are beginning to question whether the profession is best served by prohibiting layoffs of tenured faculty members until "the institution as a whole" has reached such dire financial straits that its very survival is threatened.

"The tenure principle must at all cost be preserved."

That is the policy advocated by the A.A.U.P. in its widely followed *Recommended Institutional Regulations on Academic Freedom and Tenure.*

The recommendations also allow colleges to end tenured appointments on "educational" grounds, but only when faculty members have determined that an entire program or department must be formally discontinued for the sake of the institution's overall mission.

Some A.A.U.P. members now concede, however, that higher education's widespread fiscal distress may call for a broader approach.

Many suggestions to that effect were made here recently at an invitational conference sponsored by the A.A.U.P. on the role of faculty members in "hard times." About 45 faculty members, college administrators, and representatives of national organizations in higher education attended the three-day meeting.

Officially, the A.A.U.P. remains firmly committed to the doctrine that tenured professors cannot be dismissed on financial grounds except as a last resort—and then only "under extraordinary circumstances because of a demonstrably bona fide financial exigency."

Nor has the association taken any formal steps that could be viewed as softening its resolve to protect tenured professors from overly selective layoffs or dismissals on educational grounds. But in the context of what some observers call the worst times for academe since the Great Depression, the possibility of revising some key A.A.U.P. policies on tenure is being reluctantly but seriously considered.

"I think many in A.A.U.P. have a problem" with the recommended regulations, said Harold Goldwhite, a leader of the association's statewide affiliate in California.

James C. Garland, chairman of a faculty committee that has studied the tenure issue at Ohio State University, said the panel had experienced "a lot of trouble" with the A.A.U.P.'s guidelines. He told the conference here that the latest proposal to define financial exigency at Ohio State was centering on its ability to survive "as an institution of excellence"—a concept that is not specifically addressed in the A.A.U.P.'s document.

"There are times when a tenured person should be the one to go."

Another faculty participant at the meeting here, who asked not to be identified,

Continued on Page 14, Column 1

Sports Figures Urge Higher Entrance Standards for Students Who Get Athletic Scholarships

By JOHN A. CROWL

Some prominent figures in big-time college sports are throwing themselves behind a movement to tighten academic standards for students on athletic scholarships.

Four university presidents were in a group of 14 people from 11 institutions of higher education, the Big 8 athletic conference, and the College Football Association who met last month in Brunswick, Ga., and agreed to press the National Collegiate Athletic Association to require the following standards for entering student athletes who receive financial aid:

▶ Three years of high-school English and two years of mathematics, with at least a C average, plus an overall high-school average of at least C.

▶ A combined score of 700 on the Scholastic Aptitude Test or 15 on the American College Testing Program's examination.

The other members of the group were coaches and athletic directors from big-time sports powers, including Joe Paterno, football coach at Pennsylvania State University, and Bobby Knight, basketball coach at Indiana University.

The group urged that its proposals go into effect at the beginning of the 1985-86 academic year.

Under present N.C.A.A. rules, students need have only a C average in high school to be eligible for athletic grants-in-aid. Although a number of institutions have stiffer requirements, their standards are often waived in order to compete for the best high-school athletes.

The board of the Association for Intercollegiate Athletics for Women is expected to vote this week to suspend the organization's activities. See story on Page 13.

The Brunswick group, which has become known as the "Georgia seminar," met at the invitation of Fred C. Davison, president of the University of Georgia. Mr. Davison is also president of the College Football Association, an organization of 61 major football powers.

Seminar members said they would propose legislation at next January's N.C.A.A. meeting to tighten academic standards. Further, they said, if the N.C.A.A. rejects their proposals, the group will encourage a coalition of like-minded institutions to adopt the standards on their own and "coordinate their scheduling activities with those of similar inclination toward higher academic standards."

The recommendations of the Georgia seminar have been endorsed by the athletic directors in the Atlantic Coast Conference.

Later this week, the College Football Association's annual meeting will also take up the question of academic standards. The association will discuss a committee recommendation that is reportedly more stringent than the one proposed by the Georgia seminar.

Don Canham, director of athletics at the University of Michigan and one of those who attended the Georgia meeting, said that "the primary conclusion reached by the seminar was that most of the violations in the country today are brought about when eligibility for scholarships at

Continued on Page 12, Column 4

THE MINTER-BOWEN REPORT, PART IV

While Colleges Have Proved to Be Adaptable and Tenacious, They Are Also Vulnerable

By W. JOHN MINTER
and HOWARD R. BOWEN

Although our task is not to predict what may happen to higher education in the years ahead, it would be foolish to ignore the negative features of the outlook. They are three:

▶ The declining number of 18-year-olds.

▶ The generally depressed economic conditions.

▶ The actual or impending retrenchment in public appropriations.

Colleges and universities have already been through more than a decade of financial squeeze and are not in a good position to face triple threats.

We can report, on the basis of their past record, that colleges and universities are surprisingly resilient. Moreover, we can visualize different scenarios regarding the changing environment in which they will operate.

Therefore we do not assume that utter devastation is the only possible outcome. But we do believe that the leaders of our society would be well advised to exercise care in the treatment of higher education over the next several years. Our colleges and universities are vulnerable.

Revenues

The financial position of colleges and universities cannot be discovered or described in absolute terms. No one knows precisely how much money an institution, or a system of higher education, needs to achieve an "acceptable" standard of performance.

But, by observing trends over several years, it is possible to find out whether the financial position is improving, remaining constant, or deteriorating.

To begin, the figures in Table 1 show percentage increases in revenues from year to year, by types of institution from 1978-79 to 1980-81. For purposes of comparison, the percentage changes in the Consumer Price Index are also shown.

Those figures lead immediately to two conclusions:

▶ That the annual percentage increases were substantial.

▶ That the increases were greater for the private sector than for the public sector.

When inflation and enrollment growth are taken into account, it is likely that the real income of the public institutions declined somewhat.

Unfortunately, we lack data for 1980-81 for the public sector, but from what is known about the financial situation of the states, and from scattered data we have been able to obtain, it is almost certain that revenue growth in 1980-81 was less rapid in the public sector than in the private.

It is clear, however, that a valiant effort was made throughout the higher-education system, both private and public, to avoid financial deterioration. The increase in revenues was almost sufficient to overcome the double-digit inflation, and that was a kind of victory.

Sources of Revenues and Allocation of Expenditures

Colleges and universities tap many sources of revenue. They are well known for getting money wherever it can be found. Moreover, from time to time the country goes through great debates about the financing of higher education, and major new legislation is enacted.

Yet over the years, the percentages of revenue to higher education from various sources have remained surprisingly constant. The same stability exists in the budgeting of higher-education expenditures for various purposes.

The stability of sources of revenue and of objects of expenditure is undoubtedly a strength of higher education. It indicates that the sources of revenue were steadfast and that the budgetary allocations were defensible and reasonably secure.

In recent years, however, there have been barely perceptible trends in the percentages that bear watching.

The percentage of revenues from tuition and fees has been declining ever so slightly at both private and public institutions, and so has the percentage from local government, a source that is of particular importance to two-year colleges. At the same time, the percentages from miscellaneous (and perhaps unstable) sources have been slowly rising.

The changes are slight and no alarm should be sounded, but they are worth mentioning.

On the expenditure side, there were two notable changes that suggest financial stringency.

One was the decrease in the percentage of expenditures going to instruction. Of course, instruction is the heart of higher education. It includes the expenditures of academic departments for teaching and research, and it includes faculty salaries and other expenses related to the running of those departments. Any reduction in the percentage of expenditures for instruction must be viewed with some concern.

The other trend worth watching is the slow increase in the percentage going to institutional support. This refers primarily to the costs of general administrative operations, and those costs have expanded in recent years. The shift of funds from instruction to administration was imposed by circumstances and was not intentionally sought. However, it is a disturbing development.

Assets and Liabilities

Trends in assets and liabilities are more relevant to the private sector than to the public sector. Private institutions unequivocally own their assets and owe their liabilities. That may also be true of some public institutions, but for most the assets and liabilities belong ultimately to the state governments or to other sponsoring public bodies.

Table 2 shows the changes from year to

Continued on Following Page

1: Year-to-Year Growth of Institutions' Revenue

	Change from previous year		
	1978-79	1979-80	1980-81
Private institutions			
Research universities	+11.5%	+15.6%	+15.3%
Ph.D.-granting universities	+10.0%	+13.5%	+14.1%
Comprehensive institutions	+11.4%	+12.9%	+14.6%
Selective liberal-arts colleges	+ 8.8%	+13.4%	+13.3%
Less selective liberal-arts colleges	+ 6.0%	+10.8%	+13.7%
2-year colleges	+11.8%	+10.4%	+12.9%
All types combined	+10.3%	+13.0%	+14.7%
Public institutions			
Research universities	+ 9.9%	+12.9%	n.a.
Ph.D.-granting universities	+11.1%	+11.7%	n.a.
Comprehensive institutions	+10.4%	+10.5%	n.a.
2-year colleges	+ 9.0%	+11.8%	n.a.
All types combined	+10.3%	+11.9%	n.a.
Consumer Price Index	+ 9.3%	+12.8%	+12.1%

2: Assets and Liabilities of Private Institutions

	Change from previous year		
	1978-79	1979-80	1980-81
Private institutions			
Assets			
Current	+13.7%	+14.1%	+13.1%
Endowment	+ 6.9%	+ 9.0%	+ 9.5%
Plant	+ 6.1%	+ 8.4%	+ 8.4%
Other	+ 8.7%	+ 8.3%	+ 8.5%
Total	+ 6.6%	+ 8.9%	+ 9.0%
Interfund borrowing	+16.6%	+35.8%	+35.0%
Net assets	+ 6.6%	+ 8.2%	+ 8.3%
Liabilities			
Current	+16.3%	+ 1.4%	+ 0.3%
Plant	+10.6%	+15.2%	+15.5%
Other	+ 6.3%	+ 9.0%	+ 9.6%
Total	+10.5%	+10.7%	+10.5%

3: How Presidents Assess Institutions' Financial Condition

	Gaining ground	Holding their own	Losing ground	Trend consensus *
Private institutions				
Research and Ph.D.-granting universities	69%	25%	6%	+63%
Comprehensive institutions	53%	42%	6%	+47%
Selective liberal-arts colleges	65%	26%	9%	+56%
Less selective liberal-arts colleges	37%	40%	20%	+17%
2-year colleges	29%	43%	29%	0%
1980-81 total	42%	38%	18%	+24%
1979-80	50%	42%	8%	+42%
1977-78	50%	42%	7%	+43%
1976-77	49%	36%	15%	+34%
1975-76	41%	39%	20%	+21%
1974-75	30%	48%	22%	+ 8%
Public institutions				
Research and Ph.D.-granting universities	22%	33%	44%	−22%
Comprehensive institutions	21%	24%	54%	−33%
2-year colleges	19%	26%	56%	−37%
1980-81 total	19%	26%	54%	−35%
1979-80	16%	43%	41%	−25%

* Those gaining ground minus those losing ground

4: Presidents' Expectations for Next 5 Years

	Will improve substantially	Will improve a little	No change	Will slip a bit	Will deteriorate seriously
Private institutions					
Research and Ph.D.-granting universities	31%	50%	19%	0%	0%
Comprehensive institutions	38%	51%	2%	9%	0%
Selective liberal-arts colleges	35%	56%	7%	2%	0%
Less selective liberal-arts colleges	27%	43%	7%	20%	0%
2-year colleges	0%	29%	0%	43%	0%
All types combined	23%	43%	5%	20%	0%
Public institutions					
Research and Ph.D.-granting universities	11%	67%	6%	11%	6%
Comprehensive institutions	22%	55%	6%	13%	3%
2-year colleges	22%	48%	6%	22%	2%
All types combined	21%	52%	6%	19%	2%

SOURCE: W. JOHN MINTER AND HOWARD R. BOWEN

Milton College Closes Campus; Adult Programs to Continue

MILTON, WIS.

Milton College, $4-million in debt and with only 210 students enrolled this spring, has closed its campus but is still in business.

Ronald J. Dickman, president of the college, said last week that Milton's off-campus program—with 1,500 part-time adult students enrolled at 20 locations—would continue and probably expand.

"We believe it's wiser to cease the on-campus residential program until demand returns," he said.

The $4-million debt consists mostly of mortgages on campus buildings, Mr. Dickman said, and it has been substantially paid off by giving the buildings to the mortgage holders.

Some 80 employees, including about 24 faculty members, were laid off when the on-campus program was closed last month by a vote of the college trustees.

The off-campus program, begun in 1976, has made money for the college, Mr. Dickman said.

The program offers courses toward degrees in business management, criminal justice, and nursing in five nine-week sessions each year.

With the college's resources freed from the money-losing campus program, the president said, Milton will be able to expand the off-campus activity.

The college may return to a traditional residential program sometime in the future if there is renewed demand for it, he said.

Dying Institutions: Researchers Have Ignored an Unpleasant Topic

ANN ARBOR, MICH.

Although an increasing number of colleges are closing, there has been no systematic study of what is involved, researchers at the University of Michigan contend.

James L. Miller, Jr., professor of higher education, and J. Michael Erwin, project director at the university's Institute of Labor and Industrial Relations, said at a research conference here that the tendency to ignore the unpleasant subject of dying institutions had prevented others from learning more about it.

They reported they had been able to find relatively complete data on only 27 of some 200 college closings that have occurred in the past 20 years.

"Both the process and outcomes need further study," they said, "before objective, informed conclusions can be drawn about whether closings are good or bad, and under what set of circumstances they should be resisted, permitted, encouraged, or facilitated."

The number of college closings increased from 95 in the 1960's to 141 in the 1970's, they said, and in the 1980's there may be 200 or more.

"It is possible that those predictions will prove conservative," they said, "especially if federal assistance to students and to higher education in general is reduced."

The Michigan researchers said that although nearly all the institutions closing have been private, "we may see the emergence of state-level planning for retrenchment that will parallel the state-level planning for growth in higher education which occurred in the 1960's.

"Such planning could include the closing of some public colleges in some states."

"The specter of 'private-college closings' can be used creatively for fund-raising and public-relations purposes," they said, "by those for whom [closing] is not likely, at least in the immediate future.

"For institutions which are nearer to the reality, public pronouncements about the possibility are usually weighed more closely. For them, public statements about possible closing may become self-fulfilling prophecies."

Research on college closings should give top priority to the question of when to close, Mr. Miller and Mr. Erwin said.

"Answers are not offered in the literature on closings," they said. "What appears to be necessary is research aimed at identifying what might be called the 'tipping point' of institutional survival," beyond which last-ditch efforts are hopeless.

FACT-FILE

Faculty Salaries by Discipline Group

1981-82 averages at 70 state universities and land-grant colleges

	Professor	Associate professor	Assistant professor	New assistant professor	Instructor	All ranks
Agriculture and natural resources	$32,678	$25,949	$21,794	$21,096	$16,114	$27,742
Architecture and environmental design	33,091	26,912	21,742	20,952	18,374	27,140
Area studies	32,785	23,818	19,559	19,790	15,820	25,927
Biological sciences	34,326	26,094	21,416	19,635	15,226	28,732
Business and management	38,475	30,444	26,012	25,591	19,023	30,854
Communications	32,841	25,351	20,555	19,672	15,545	25,111
Computer and information sciences	38,608	29,697	25,386	25,395	19,139	29,851
Education	32,510	25,469	20,678	19,238	16,674	25,812
Engineering	37,382	29,017	25,243	25,204	17,953	31,949
Fine and applied arts	30,984	23,740	18,950	17,709	15,600	24,407
Foreign languages	33,728	24,338	19,380	17,286	16,005	25,344
Health professions	37,422	29,226	24,009	23,611	17,491	27,996
Health services, paramedical technology	32,983	22,936	18,323	——	14,324	18,131
Home economics	33,357	25,722	21,071	20,219	16,551	24,030
Interdisciplinary studies	35,322	25,713	19,532	17,954	14,892	25,877
Law	46,305	35,378	31,009	28,789	18,119	41,328
Letters	33,615	24,257	19,065	17,569	15,049	25,100
Library science	32,483	25,749	19,217	20,679	18,678	25,005
Mathematics	35,774	26,070	20,616	19,869	15,289	28,342
Physical sciences	36,209	26,421	21,419	20,131	17,096	30,925
Psychology	34,936	25,016	19,835	18,829	17,279	28,206
Public affairs and services	34,834	27,633	22,386	21,006	18,693	27,290
Social sciences	35,136	25,844	20,277	18,734	17,072	27,921
Technical and occupational curriculums	34,295	26,339	21,478	21,024	16,417	23,645
All disciplines	$35,232	$26,498	$21,841	$21,065	$16,757	$28,120

SOURCE: OFFICE OF INSTITUTIONAL RESEARCH, OKLAHOMA STATE UNIVERSITY

Colleges Have Proved to Be Adaptable, Tenacious—and Vulnerable

Continued from Preceding Page

year in the assets and liabilities of our sample of private institutions. The figures refer to percentage changes from the end of one fiscal year to the next, up to fiscal 1981.

Comparing changes in related assets and liabilities, current assets increased much more than current liabilities; plant assets increased less than plant liabilities; total assets increased slightly less than total liabilities; and interfund borrowing—the temporary transfer of funds within an institution—increased sharply.

The marked improvement in the current ratio of assets to liabilities is a good sign, and the increase in interfund borrowing is a sign of financial stringency. It is likely that a particular group of institutions was responsible for one of those changes and a different group for the other.

Altogether, the asset and liability data for the private sector indicate that only minor changes occurred. Except for the increase in interfund borrowing, the data do not signal much distress. That conclusion is confirmed by the stability over the years in the percentage distribution among various categories of assets and of liabilities. The percentages have remained remarkably steady, and the minor changes have on the whole been favorable.

Although the asset and liability data on public institutions are sparse, one indication of stringency is the substantial 29-per-cent increase in current liabilities during the year 1979-80.

Presidents' Assessments

As part of our survey, we asked the presidents of the sample institutions to assess recent trends in the financial condition of their institutions. We asked each of them to indicate whether his or her college or university was gaining ground, holding its own, or losing ground. As shown in Table 3, the responses varied greatly by types of institution.

Those in the best shape, according to the presidents, were the private universities and the selective, private, liberal-arts colleges. And the private sector as a whole was far better off than the public sector.

The table also shows the trend in responses over a period of years, indicating that the presidents' assessments were considerably less sanguine in 1980-81 than in the previous years. The recent trend is downward.

We also asked the presidents to give their views as of 1980-81 on the outlook for their institutions over the next five years. The responses regarding the future, shown in Table 4, were on the whole more favorable than those for the immediate present.

However, there were differences among types of institution. The presidents of private universities and selective liberal-arts colleges were relatively optimistic, and the presidents of the less selective liberal-arts colleges and the two-year colleges were relatively pessimistic.

Concluding Comments

The information we have gathered pertains to 1979-80 and 1980-81, and with less completeness to 1981-82.

We tried to find out what had actually been happening to higher education during those years. We did not attempt any forecast of what might lie ahead in 1982-83 and later years.

Since the early 1970's, perceptions of the condition of American higher education have been strongly influenced by gloomy forecasts of the future. Time after time, the forecasts have not come true, and reality has proved to be more favorable than expected.

The same may be said of the early 1980's, which have really been an extension of the 1970's. The worst fears, at least up to 1980-81, have not materialized.

Enrollment has held up, although the composition of the student population has changed; budgets have been balanced; little retrenchment in educational programs has occurred; the qualifications of the faculties have never been higher; faculty-student ratios have not changed very much; efficiency of operation has probably improved; and few institutions (no major ones) have expired.

Higher education has proved itself to be adaptable and tenacious. Most of the institutions that encountered reverses have been able to surmount their difficulties.

Of course there have been some negative factors.

Increasing proportions of the students have come to colleges poorly prepared academically, and many have been excessively oriented to careers and have not been as receptive to liberal learning as many educators (including the writers) would like. The proportion of part-time faculty members has increased, and working conditions for faculty members may have deteriorated somewhat.

But the changes are more in the nature of challenges to be overcome than of inevitable conditions to be endured.

One surprising element in the situation over the past year or two has been that public colleges and universities appear to have made less progress, or to have been harder hit, than private institutions. We surmise that this was due to the tax revolt and the economic depression, both of which have exerted a negative influence on tax receipts and therefore on state appropriations.

Those same influences have not affected the revenue sources of the private sector. Its turn may come, if and when federal and state student-aid appropriations are cut.

The financial problems over the past decade, and continuing up to the present, have been real, even though some have been concealed. They have been in the nature of a steady and relentless squeeze.

Although most formal budgets have been balanced, it is quite clear that not all costs have been funded. Most institutions have accumulated large backlogs of deferred maintenance and deferred replacement of buildings and other durable assets.

No one knows how big this backlog really is.

Perhaps more important, most institutions have failed to increase faculty and staff compensation in proportion to inflation, and most have fallen even further short of increasing compensation to match the earnings of people of comparable skills in other industries. The faculty members and other workers in academe have borne the brunt of the financial squeeze.

As indicated in Part I of this series, the decline in real compensation of faculty and staff members has been going on for more than a decade, and it has continued in the first few years of the 1980's.

The effects of that slow attrition have been masked partly because it has been gradual and partly because the responses of supply have tended to lag far behind changes in demand.

Faculty members who have made lifetime commitments to the academic profession do not leave it immediately upon the onset of unfavorable trends in compensation and other working conditions. Neither do people preparing for the academic profession immediately switch to other fields when conditions in academe become less favorable. Because of those lags in response, adverse trends of the past decade have not resulted in a wholesale flight from the profession. But if conditions continue to deteriorate, the number and caliber of the people preparing for the profession will probably decline, and the number already in the profession who will try to leave it will probably increase.

The current flight to industry of faculty members in engineering and business, and the difficulty of employing people in those fields, may be a harbinger of what lies ahead. It is sometimes forgotten that those are by no means the only fields in which faculty members may have outside options.

NOTE

This is the final article in a four-part series by W. John Minter and Howard R. Bowen on trends in American higher education.

Mr. Minter is a higher-education consultant in Boulder, Colo., and Mr. Bowen is professor of economics and education at the Claremont Graduate School.

This Minter-Bowen report continues, in a new format, a series of six studies published from 1975 to 1980.

Their previous reports were: *Private Higher Education*, published by the Association of American Colleges in 1975, 1976, and 1977; *Independent Higher Education*, published by the National Association of Independent Colleges and Universities in 1978 and by the National Institute of Independent Colleges and Universities in 1980; and *Preserving America's Investment in Human Capital*, published in 1980 by the American Association of Community and Junior Colleges, the American Association of State Colleges and Universities, and the National Association of State Universities and Land-Grant Colleges.

Women's Sports Unit Expected to Suspend Activity this Week

By PAUL DESRUISSEAUX

WASHINGTON

The executive board of the Association for Intercollegiate Athletics for Women is expected to act this week to suspend all of the organization's programs and services until its antitrust lawsuit against the National Collegiate Athletic Association is settled.

The A.I.A.W. was scheduled to poll by telephone the 26 members of its executive board on a proposal to dissolve the 10-year-old association in all but name until the suit is resolved.

The A.I.A.W., which guided the expansion of women's intercollegiate athletic programs, has asked the federal district court here to bar the N.C.A.A. from running its own women's sports championships, which it began sponsoring last fall. A trial is not expected before late summer.

Under the dissolution proposal, the A.I.A.W. would cease operations as of June 30. At that time the organization, under the management of its four-member executive committee, would exist only to continue its legal battle. If the lawsuit is successful, the 26-member executive board would be reconstituted and the A.I.A.W. would go back into business. Otherwise, it would remain dissolved. Most members of the A.I.A.W. staff would be laid off on June 30, although a skeleton "transition" team would stay on through August 30.

Ann Uhlir, executive director of the A.I.A.W., said last week that approval of the dissolution was not in question, since the executive board voted 21 to 3 in April to endorse the plan. "All debate and discussion of this proposal has already taken place," Ms. Uhlir said.

Special Meeting Canceled

Originally, the entire membership was to vote on the proposal at a special meeting here on June 7. That meeting was canceled when only 95 of the 759 member institutions—far short of the 253 required for a quorum—said they would send a voting delegate. Lacking a quorum, the executive board will act on the proposal.

At the organization's annual meeting in January, however, the membership took several actions that paved the way for dissolution of the A.I.A.W., which stopped processing membership renewals as of March 1.

The A.I.A.W. filed its antitrust suit last October, charging that the N.C.A.A. had unfairly used profits from men's intercollegiate athletic programs to offer a $3-million program of championships for women.

"We are alleging in the suit that the N.C.A.A.'s entry into women's athletic championships precludes anyone else's sponsoring such events, because it is subsidizing those programs with more than anyone can possibly earn from them," says Ms. Uhlir. "They have put $3-million into this, and the most that could be made is $500,000. They are not in fair competition."

Officials of the women's group say the N.C.A.A.'s sponsorship of women's championships has resulted in losses to the A.I.A.W. of members, championship participants, sites for events, and television revenue essential to the continued operation of the organization.

Fewer Teams Compete

More than 20 per cent of A.I.A.W.'s members did not renew this year, and there has been a 12-per-cent decrease in the number of teams competing in its championships. Most of those losses were among Division I institutions, which have the largest and most visible women's sports programs. Because of that, network and cable-television and commercial sponsors have withdrawn support for A.I.A.W. events.

The organization determined that it could not continue to operate on the dues paid by its remaining members, and that it had no way of matching the $3-million the N.C.A.A. pumped into its women's program.

The A.I.A.W. failed in an attempt in February to obtain a preliminary injunction barring the N.C.A.A. from offering women's championships while the suit was being contested.

An appeal of that decision was also denied.

The N.C.A.A. has argued that the A.I.A.W. is trying to protect its own past "monopoly" over women's intercollegiate athletics.

The A.I.A.W. submitted its "final statement of contentions and proof" to the court on May 7, and the N.C.A.A. was to submit its response last week.

The case will be heard by Judge Charles R. Richey of the U. S. District Court for the District of Columbia. Judge Richey earlier instructed the two organizations to pursue an out-of-court settlement.

However, "the potential for a successful settlement at this time is remote," says Ms. Uhlir, "and in all probability we will go to trial."

A date has not yet been set, but the case is not expected to go to trial much before August.

Top 20 College Football Coaches All Earn More than $100,000

MIAMI

The winningest coach in college football—Paul "Bear" Bryant of the University of Alabama—is also its best rewarded, earning a total of $450,000 in salary and benefits.

In a survey of income earned by college football's best-paid coaches, the Miami *Herald* reported that the top 20 in the greenback bowl all earned more than $100,000.

The figures represent base salary and benefits plus income from football-related radio and television activities. Income from other outside sources is not reflected in the "estimated total compensation" amounts.

In addition to the customary retirement and health-insurance plans, many of college football's top coaches receive assorted other benefits, including automobiles, country-club memberships, and additional insurance policies.

Alabama's Coach Bryant earns a base salary of $104,000, radio-and-television income of $300,000, and an estimated $46,000 in various benefits. The estimated total compensation for the Alabama coach does not include his income from commercial endorsements for a number of services and products sold regionally and nationally, from speaking engagements (for which he earns up to $15,000 per appearance), and other outside sources.

Following is the *Herald*'s list of the top 20 wage earners among college football coaches.

Paul (Bear) Bryant, U. of Alabama	$450,000
Barry Switzer, U. of Oklahoma	$270,000
Jackie Sherrill, Texas A&M U.	$240,000
Lou Holtz, U. of Arkansas	$226,000
Jerry Claiborne, U. of Kentucky	$152,500
Howard Schnellenberger, U. of Miami	$150,000
Chuck Fairbanks, U. of Colorado	$150,000
Bo Schembechler, U. of Michigan	$147,500
Tom Osborne, U. of Nebraska	$140,500
Bobby Bowden, Florida State U.	$140,000
Earle Bruce, Ohio State U.	$138,000
Johnny Majors, U. of Tennessee	$128,500
Charley Pell, U. of Florida	$123,000
Fred Akers, U. of Texas	$113,400
Don James, U. of Washington	$112,500
Lee Corso, Indiana U.	$108,500
Hayden Fry, U. of Iowa	$105,500
John Robinson, U. of Southern Cal.	$102,500
Joe Paterno, Pennsylvania State U.	$102,500
Vince Dooley, U. of Georgia	$100,000

Coming September 8

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News Summary

Articles on inside pages

Congress has approved an extra $1.3-billion for Guaranteed Student Loans, to keep the program from running out of money this year, but the legislation may be vetoed on other grounds. Story on Page 19.

Budget writers in the House of Representatives renewed their search for a fiscal 1983 spending plan last week, after members rejected eight different proposals. Story on Page 19.

Giving to educational and charitable institutions rose 12.3 per cent last year, outpacing inflation. Story and table on Page 6.

The average salary for a full-time faculty member is 9.2 per cent higher this year than last, according to federal statistics. Story and Fact-File listing 1981-82 faculty salaries, by state, on Page 10.

Washington University will receive $25-million from the Monsanto Company over five years for cellular research. Story on Page 9.

The drive for compulsory continuing education for doctors, lawyers, and other professionals is reported to be slowing down. Story on Page 16.

Only about half as many men are studying to become Roman Catholic priests today as in 1972, says the new *Official Catholic Directory*. Story on Page 17.

A sharp line exists between "serious academic work and serious intellectual work," says Richard Sennett, director of the New York Institute for the Humanities. Story on Page 23.

The Polish government has ordered a review of the professional qualifications of university faculty members, a move some professors believe could lead to a political purge. Story on Page 21.

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Moves to Control Abuses in Sports Eyed by Major Universities

Two associations plan talks on how presidents can best deal with violations

By **MALCOLM G. SCULLY**

WASHINGTON

Worried by widespread reports of recruiting violations and other abuses in big-time college sports, more and more college presidents are seeking increased control over their athletic programs.

Next week the American Council on Education will bring together a small group of university executives for what Jack Peltason, the council's president, called an "informal, off-the-record discussion" of the seriousness of the problems facing big-time college sports, and of the steps presidents might take to control them.

And, in a move that Thomas A. Bartlett, its president, termed "a sign of the times," the Association of American Universities will name a committee this summer to investigate whether it should devote special attention to intercollegiate athletics. That would represent a departure for the A.A.U., which has traditionally concerned itself with research and graduate education.

'Allegations in the Newspapers'

John W. Ryan, president of Indiana University and this year's chairman of the A.A.U., said presidents were increasingly concerned about "allegations in the newspapers about violations and improprieties" in intercollegiate sports. The association's committee, he added, will "consider whether those problems warrant special attention by the A.A.U. itself."

The presidents of major football and basketball powers have often been criticized for exerting too little influence on their athletic programs.

Concern about such criticism was reflected in an internal report prepared by Robert H. Atwell, vice-president of the American Council on Education.

"There is a strong body of opinion which holds that the problems of corruption in big-time football and basketball are of crisis proportions and threaten to discredit our institutions," he wrote.

"The recent revelations about transcript manipulation and the allegations by coaches and former coaches about illegal payments to athletes have raised serious concerns about whether big-time football and basketball programs are really under the control of the chief executives and governing boards."

A copy of the report was obtained by *The Chronicle* from an outside source.

Mr. Ryan of Indiana and William C. Fri-

Continued on Page 14, Column 1

How one institution tries to insure that its athletes make academic progress

By **LORENZO MIDDLETON**

ALBUQUERQUE, N.M.

The students were clearly athletes. About 50 of them—mostly football players with chests and arms bulging under their T-shirts—were gathered here in one of the University of New Mexico's arenalike lecture halls.

Some plainly would rather have been somewhere else. They slouched and shifted in their little wooden chairs, their legs too bulky or too long to fit comfortably under the desks.

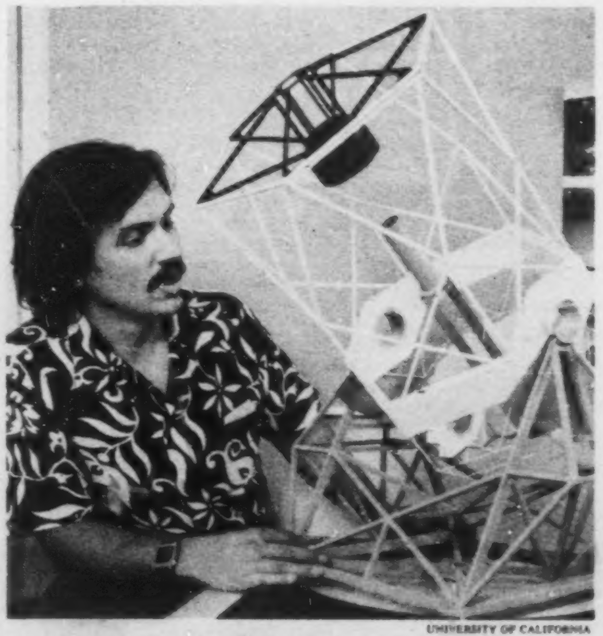
Most were immersed in their books, however, studying for finals or writing term papers. They were attending what is known here as the "study table," held, for varsity athletes only, four times a week for two hours a night, semester after semester.

It is probably better staffed and more closely monitored than any other study session on campus. Serving the 50 or so athletes are about a dozen tutors (graduate students who are paid by the athletic department), a full-time academic counselor, and a part-time counselor and "tutor coordinator." In addition, an athletic coach is always there to maintain discipline.

Whether they like it or not, many of the athletes at the University of New Mexico find themselves seated at the study table for at least one semester during their college careers. There are few truants—the penalty for an unexcused absence is a 6 a.m. makeup session.

The rules are set by the coaches and vary from team to team. All new football players, for example, must attend the study table during their first semester at the university, no matter what their grades were in high school or junior college. Oth-

Continued on Page 14, Column 1



UNIVERSITY OF CALIFORNIA

Jerry E. Nelson of the Lawrence Berkeley Laboratory examines a model of the giant telescope he hopes to build.

Berkeley Astronomer's Achievable Dream: a 10-Meter Telescope

By **KIM McDONALD**

BERKELEY, CAL.

Not far from the spot where University of California scientists constructed the first atom smasher more than 50 years ago, Jerry E. Nelson dreams of building another revolutionary scientific instrument—one capable of seeing several billions of years into the universe's past and of pushing the university to the forefront of modern astronomy.

He envisions a 10-meter telescope, the most powerful ground-based optical telescope in the world. While it is still something of a dream, it is now considered an achievable goal, one being pursued by several dozen scientists and engineers at four California campuses—as well as at the university's Lawrence Berkeley Laboratory and Lick Observatory.

The university has spent $1.1-million on designing and developing the telescope, which Mr. Nelson, a professor at the Berkeley campus and a researcher at the Lawrence laboratory, has nurtured from the start.

The university recently negotiated with the University of Hawaii

Continued on Page 8, Column 1

1981 Giving to Education and Charities Exceeded Rate of Inflation

NEW YORK

Giving to educational and charitable organizations totaled $53.62-billion in 1981, an increase of 12.3 per cent in a year, according to estimates by the American Association of Fund-Raising Counsel.

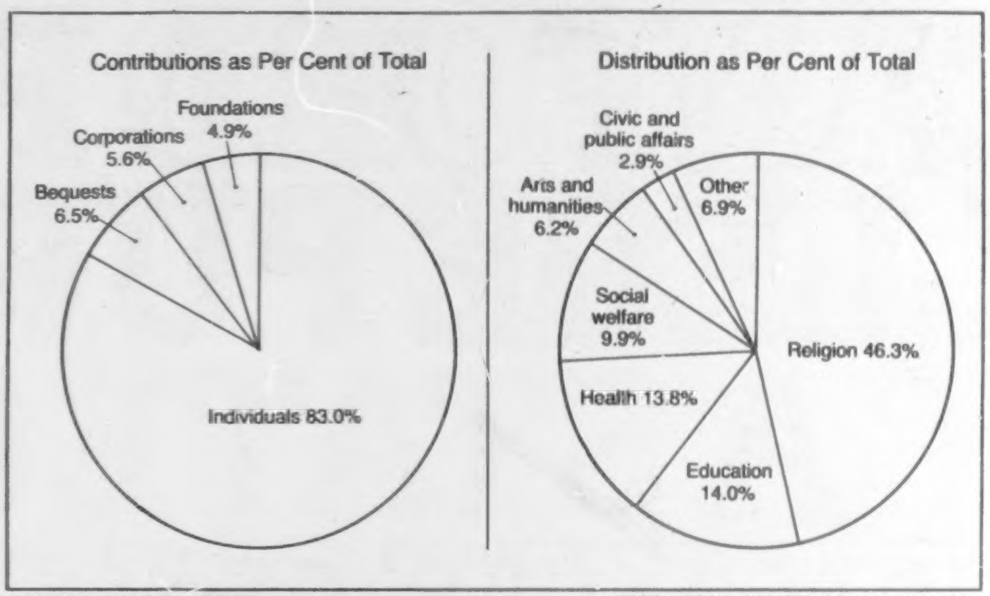
The increase was the largest ever recorded and, for the first time in three years, exceeded the rate of inflation.

Of the total, an estimated $7.49-billion went to education, including church-related and other private elementary and secondary schools as well as colleges and universities. Also included in the total for education is money given for research that is educational in nature and conducted at an educational institution.

For colleges and universities alone, the Council for Financial Aid to Education estimated earlier that giving in 1981 amounted to $4.21-million, an increase of 11.3 per cent over the previous year (*The Chronicle*, May 26).

The American Association of Fund-Raising Counsel estimated that total giving for education at all levels in 1981 was up 12.1 per cent, about the same as giving for all purposes, and, as in the previous year, represented 14 per cent of total giving.

Copies of the A.A.F.R.C.'s 1982 annual report, *Giving U.S.A.*, are available for $25 each ($16 to annual subscribers) from the American Association of Fund-Raising Counsel, 25 West 43rd Street, Suite 1519, New York 10036.



CHRONICLE CHART BY PETER H. STAFFORD

SOURCE: AMERICAN ASSOCIATION OF FUND-RAISING COUNSEL

Largest Gifts to Universities and Colleges in 1981

Following is a list of the largest gifts to colleges and universities in 1981 as tabulated by the American Association of Fund-Raising Counsel:

Recipient	Donor	Amount
Louisiana State U.	Pennington Medical Foundation	$100,000,000
U. of California at Los Angeles	Hearst Corporation	62,000,000
U. of Oklahoma	Mr. and Mrs. Bill Saxon	30,000,000
Arkansas College	Jean Brown	14,300,000
Austin Presbyterian Seminary	Jean Brown	11,700,000
Michigan State U.	W. K. Kellogg Foundation	10,000,000
Boise State U.	Harry W. Morrison Family Foundation	6,500,000
Washington U. (Mo.)	Elinor Anheuser Storz	6,200,000
Swarthmore College	Eugene M. Lang	6,000,000
Harvard U.	Joseph E. Seagram & Sons	5,800,000
Texas A&I U.	Caesar Kleberg Foundation	5,300,000
Illinois Institute of Technology	Pritzker Foundation	5,000,000
Indiana U.	Lilly Endowment	5,000,000
Kent State U.	Jerry Silverman, Inc.	5,000,000
U. of Missouri at Columbia	Alberta Briegel Ponder	5,000,000
Northwestern U.	Arthur Rubloff	5,000,000
William M. Scholl College of Podiatric Medicine	Dr. Scholl Foundation	5,000,000
U. of Texas System	Houston Endowment	5,000,000
U. of Southern California	George Lucas	4,660,000
Babson College	Olin Foundation	4,300,000
U. of Michigan	W. K. Kellogg Foundation	4,000,000
Washington U. (Mo.)	Edward Mallinckrodt, Jr.	3,880,000
Duke U.	Duke Endowment	3,180,000
Columbia U.	Ludwig Schaefer	3,400,000
Johns Hopkins U.	William Penn Foundation	3,300,000
Cornell U.	J. N. Pew Jr. Charitable Trust	3,000,000
Harvard U.	William and Lucille Nickerson	3,000,000
U. of Puget Sound	An anonymous donor	3,000,000
Whitman College	Vernita Watts Adams	3,000,000
DePauw U.	Philip S. Charles	2,700,000
U. of California at Berkeley	Alfred P. Sloan Foundation	2,500,000
U. of Illinois	Harry H. Ferguson	2,500,000
Northwestern U.	Mrs. Wayne V. Jones	2,500,000
Massachusetts Institute of Technology	Alfred P. Sloan Foundation	2,500,000
Whitman College	Mina S. Schwabacher	2,500,000
St. Mary's U. of San Antonio	Albert B. Alkek	2,400,000
College of St. Teresa	Sisters of St. Francis	2,300,000
Babson College	Anonymous	2,000,000
Case Western Reserve U.	Andrews Foundation	2,000,000
Drake U.	Gardner and Florence Call Cowles	2,000,000
U. of Florida	Gas Research Institute	2,000,000
U. of Michigan	A. Alfred Taubman	2,000,000
U. of Minnesota	Marshall W. Alworth	2,000,000
U. of North Carolina at Greensboro	Benjamin Cone	2,000,000
U. of North Dakota	W. Kenneth Hyslop	2,000,000
Princeton U.	Thomas Nichol, Jr.	2,000,000
Oregon State U.	W. K. Kellogg Foundation	1,900,000
Princeton U.	Carl Egner	1,900,000
Le Moyne College	Dr. Hugh P. Reilley	1,650,000
Rochester Institute of Technology	Mary Flagler Cary Charitable Trust	1,600,000
Duke U.	Nello L. Teer, Jr., and R. Dillard Teer	1,500,000
Emory U.	Michael C. Carlos	1,500,000
U. of Houston	Cullen Foundation	1,500,000
U. of Iowa	Henry and Alberta Ponder	1,500,000
Pacific Lutheran U.	M. J. Murdock Charitable Trust	1,500,000
U. of South Carolina	Arthur Brown, Jr	1,500,000
U. of Wisconsin at Madison	W. K. Kellogg Foundation	1,500,000
Wabash College	Ruth Lilly	1,300,000
Philadelphia College of Art	Mabel Pew Myrin Trust	1,250,000
U. of Chicago	Chase Manhattan Bank	1,250,000
Michigan State U.	Homer E. Nowlin	1,200,000
Brandeis U.	Harold L. Fierman	1,000,000
Davidson College	E. H. Little	1,000,000
Eastern Illinois U.	Newton E. Tarble	1,000,000
Southern Methodist U.	Roy M. & Phyllis Gough Huffington	1,000,000
Texas A&M U.	David Bullock Harris	1,000,000
Washington and Lee U.	Egbert B. Doggett	1,000,000
Whitman College	Grace Farnsworth	1,000,000

FACT–FILE

53 Largest U.S. Foundations, by Total of Grants Awarded Last Year

	1980 grants	1981 grants	1981 assets†
1. Ford Foundation	$103,222,000	$ 89,085,000	$ 2,565,572,000
2. Andrew W. Mellon Foundation	58,191,000	58,423,000	817,000,000
3. Pew Memorial Trust	45,478,000	51,272,000	1,100,000,000
4. W. K. Kellogg Foundation	47,671,000	49,813,000	746,020,000
5. Rockefeller Foundation	42,469,000*	42,558,000	883,200,000
6. Kresge Foundation	29,768,000	38,360,000	567,833,000
7. Robert Wood Johnson Foundation	39,778,000	35,858,000	1,094,207,000
8. Duke Endowment	33,420,000	35,818,000	406,513,000
9. Lilly Endowment	25,330,000	30,240,000	763,615,000
10. Charles Stewart Mott Foundation	30,539,000	27,693,000	386,204,000
11. Rockefeller Brothers Fund	22,895,000	26,608,000	148,085,000*
12. McKnight Foundation	9,153,000	25,737,000*	337,203,000*
13. Houston Endowment	15,380,000	18,817,000	260,000,000*
14. Alfred P. Sloan Foundation	16,734,000	15,542,000	253,385,000
15. James Irvine Foundation	11,479,000	14,122,000	272,361,000
16. Moody Foundation	11,238,000	13,500,000*	220,000,000*
17. Henry J. Kaiser Family Foundation	12,270,000	12,476,000	221,352,000
18. Bush Foundation	13,525,000	12,257,000	232,525,000
19. Edna McConnell Clark Foundation	11,488,000	11,929,000	200,337,000
20. Robert A. Welch Foundation	8,989,000	11,718,000	149,462,000
21. Carnegie Corporation of New York	10,884,000	11,686,000	335,717,000
22. John A. Hartford Foundation	7,710,000	10,257,000	125,470,000
23. Charles A. Dana Foundation	8,296,000	10,128,000	96,200,000
24. Vincent Astor Foundation	10,151,000*	12,193,000	42,646,000
25. Surdna Foundation	9,277,000	9,466,000	209,690,000
26. William Penn Foundation	7,977,000	8,990,000	129,169,000
27. Richard King Mellon Foundation	14,173,000*	8,795,000*	354,773,000*
28. Gannett Foundation	6,784,000	8,752,000	229,000,000
29. Sid W. Richardson Foundation	6,234,000	7,736,000*	105,000,000*
30. Commonwealth Fund	9,013,000	7,292,000	140,162,000
31. Northwest Area Foundation	6,665,000	7,276,000	131,506,000
32. Hearst Foundations	7,554,000*	7,200,000*	175,000,000*
33. Z. Smith Reynolds Foundation ‡	6,246,000	6,483,000	89,435,000*
34. Charles Hayden Foundation	4,280,000	6,312,000	75,154,000
35. Sarah Scaife Foundation	5,744,000	6,274,000*	111,371,000*
36. Amon G. Carter Foundation	10,085,000	6,254,000	98,703,000
37. William R. Kenan, Jr., Charitable Trust	4,281,000	6,167,000	116,468,000
38. Callaway Foundation	4,853,000	5,870,000	80,779,000
39. Howard Heinz Endowment	5,640,000	5,640,000**	86,366,000**
40. Claude Worthing Benedum Foundation	3,494,000	5,559,000	84,742,000
41. Henry Luce Foundation	2,624,000	5,556,000	118,551,000
42. George Gund Foundation	5,035,000	5,518,000	85,000,000
43. Charles F. Kettering Foundation	5,994,000	5,188,000	76,882,000
44. John Simon Guggenheim Memorial Foundation	4,927,000	5,123,000	88,371,000
45. Smith Richardson Foundation	3,080,000	4,994,000	96,282,000
46. El Pomar Foundation	3,890,000	3,587,000	81,500,000
47. John and Mary Markle Foundation	1,852,000	3,585,000	53,959,000
48. Mary Flagler Cary Charitable Trust	2,585,000	3,261,000	69,199,000
49. William T. Grant Foundation	2,084,000	3,248,000	73,423,000
50. Danforth Foundation	3,340,000*	3,131,000	87,471,000
51. Research Corporation	2,575,000	2,481,000	46,298,000
52. Tinker Foundation	1,667,000	1,575,000	30,477,000
53. Elliott White Springs Foundation	1,376,000	1,490,000	16,372,000
Total for 53 foundations	$779,387,000	$828,893,000	$15,366,030,000

* Estimate
** 1980 figure
† Market value at end of year
‡ Includes assets and excise taxes of two trusts

SOURCE: AMERICAN ASSOCIATION OF FUND-RAISING COUNSEL

FACT–FILE

Pay for Full-Time Faculty Members Averages $24,843, Up 9.2 Pct.

WASHINGTON

The average salary this year for full-time faculty members on nine-month contracts is $24,843, an increase of 9.2 per cent from last year, according to the National Center for Education Statistics.

The inflation rate was 8.9 per cent in the 12 months ending last December, the center said.

Previous yearly increases in average faculty salaries reported by the center were 6 per cent in 1978-79, 7.8 per cent in 1979-80, and 9.1 per cent in 1981-82.

For male faculty members, the 1981-82 average salary is $26,172, compared with $21,337 for female faculty members, the center said.

In addition to salary, faculty members are receiving an average of $4,956 each in fringe benefits this year. Public institutions reported fringe benefits averaging $5,030, compared with $4,772 for private institutionss.

The total number of full-time faculty members has increased in the past year by 1.2 per cent, which compares with an estimated increase of 1.9 per cent in enrollment last fall, the center said.

The N.C.E.S. salary data were based on information from 2,350 of the country's 3,253 colleges and universities.

The average 1981-82 salary of $24,843 reported by the center was almost identical to the overall average of $24,834 estimated by the Chronicle Survey on the basis of a sampling of individual faculty members by John Minter Associates of Boulder, Colo. (*The Chronicle*, November 11).

The Chronicle Survey estimated that the overall one-year increase in average salaries was 8.9 per cent.

Average 9-Month Faculty Salaries and Increases

	Salaries for 1981-82							Increases since 1980-81						
	All ranks	Professors	Associate professors	Assistant professors	Instructors	Lecturers	No academic rank	All ranks	Professors	Associate professors	Assistant professors	Instructors	Lecturers	No academic rank
All institutions														
Men	$26,172	$32,907	$25,063	$20,805	$16,885	$18,338	$24,645	9.3%	8.8%	8.8%	9.4%	8.9%	7.6%	8.6%
Women	21,337	29,612	23,719	19,546	15,973	16,077	22,142	8.8%	8.7%	8.7%	8.3%	8.0%	9.0%	8.6%
Men and women	24,843	32,547	24,774	20,350	16,393	17,274	23,724	9.2%	8.8%	8.7%	8.9%	8.4%	8.2%	8.7%
Public institutions														
Men	26,434	32,881	25,497	21,360	17,435	18,268	25,087	9.1%	8.3%	8.4%	9.3%	9.0%	7.1%	8.8%
Women	22,016	30,476	24,462	20,195	16,549	15,888	22,647	8.6%	8.0%	8.1%	8.0%	8.3%	7.9%	8.5%
Men and women	25,205	32,617	25,279	20,943	16,948	17,148	24,193	8.9%	8.2%	8.3%	8.9%	8.6%	7.4%	8.6%
Private institutions														
Men	25,536	32,960	24,112	19,749	15,831	18,543	17,881	10.0%	9.9%	9.7%	9.6%	9.0%	9.5%	9.5%
Women	19,591	27,830	22,220	18,370	14,733	16,630	15,039	9.5%	9.8%	10.3%	9.1%	7.1%	12.4%	8.3%
Men and women	23,951	32,402	23,687	19,240	15,260	17,642	16,782	9.8%	9.9%	9.7%	9.3%	8.1%	10.6%	9.1%

Average 9-Month Salaries, Compared by State

	Public Institutions						Private Institutions					
	Professors	Associate professors	Assistant professors	Instructors	Lecturers	No academic rank	Professors	Associate professors	Assistant professors	Instructors	Lecturers	No academic rank
Alabama	$30,018	$23,937	$21,861	$16,023	$17,897	$19,520	$23,585	$17,410	$16,548	$14,068	$10,227	$15,227
Alaska	—	—	—	—	—	—	—	22,500	21,203	18,723	—	—
Arizona	38,243	28,824	23,048	17,912	19,330	26,647	25,561	22,480	18,745	13,752	—	—
Arkansas	29,328	22,946	19,639	15,197	11,581	16,558	23,361	19,896	17,497	14,964	—	12,800
California	35,236	27,569	22,581	21,833	—	31,343	36,700	26,045	21,141	17,373	17,231	21,331
Colorado	31,143	24,405	20,433	17,391	19,386	19,888	31,008	22,770	17,819	15,193	14,650	14,749
Connecticut	30,213	24,438	21,151	17,333	15,102	18,146	37,524	25,210	20,540	16,914	18,033	17,445
Delaware	38,454	26,606	20,970	18,351	15,604	22,615	21,216	19,803	16,647	13,440	—	—
District of Columbia	34,163	27,270	22,474	19,404	—	—	36,276	26,982	21,487	17,944	21,038	—
Florida	32,887	24,348	20,240	16,456	16,144	19,237	30,001	22,776	18,336	12,917	14,656	17,306
Georgia	33,038	25,457	20,783	16,662	17,470	—	28,967	21,051	17,016	13,301	—	14,229
Hawaii	35,023	25,771	20,932	17,283	—	23,490	22,964	19,149	16,473	12,901	12,910	—
Idaho	27,851	22,606	18,990	17,410	13,651	20,304	21,575	18,568	17,130	13,774	—	—
Illinois	33,099	25,737	21,647	17,720	17,447	23,505	35,332	24,786	20,278	16,827	18,907	19,895
Indiana	31,332	25,031	20,008	14,599	16,551	15,022	28,780	22,796	18,702	15,080	15,800	17,510
Iowa	33,287	25,396	20,586	16,041	20,268	19,478	25,830	20,711	17,871	15,662	20,900	14,620
Kansas	31,034	23,637	19,814	15,845	16,370	19,629	20,188	17,611	15,169	13,444	12,415	14,172
Kentucky	30,188	23,563	19,683	16,302	14,638	17,621	23,354	19,175	15,950	13,360	11,886	13,936
Louisiana	31,702	25,283	21,191	16,919	15,911	18,809	28,977	23,327	18,331	14,220	—	—
Maine	28,667	22,832	18,069	14,079	15,874	17,401	34,214	24,817	19,114	16,943	18,646	15,980
Maryland	30,649	25,911	21,089	16,835	15,397	—	36,161	23,524	18,848	15,016	13,899	17,577
Massachusetts	29,451	24,837	21,286	17,031	—	22,530	36,122	25,865	20,959	16,628	19,698	15,017
Michigan	31,993	25,257	21,297	17,626	17,052	26,598	27,721	22,637	18,589	15,511	14,789	20,822
Minnesota	33,309	23,507	19,338	17,191	23,964	23,936	29,192	23,149	19,238	15,830	16,287	17,398
Mississippi	30,117	24,312	19,769	15,501	—	17,907	21,625	17,744	14,583	12,740	—	10,325
Missouri	27,742	23,684	19,040	15,476	15,706	20,264	29,870	21,886	18,025	14,548	14,434	16,949
Montana	29,141	23,808	20,506	17,422	19,135	20,651	23,955	19,174	16,911	16,195	—	17,490
Nebraska	30,293	24,392	19,961	16,584	13,542	18,054	25,444	21,407	17,623	14,987	13,201	15,580
Nevada	35,183	27,501	22,643	20,122	24,156	21,649	—	—	—	—	—	—
New Hampshire	28,036	23,224	19,228	15,278	15,087	17,000	33,234	22,876	19,544	14,702	11,200	12,764
New Jersey	33,018	26,723	21,623	16,874	15,217	20,770	35,824	25,291	20,082	15,482	18,902	15,750
New Mexico	33,253	25,496	20,762	17,097	18,738	22,880	22,370	16,587	12,919	12,012	—	17,582
New York	28,437	23,990	18,922	15,588	—	—	35,357	25,703	20,256	15,743	18,923	19,760
North Carolina	33,548	26,138	21,971	17,266	17,663	16,119	24,294	20,219	16,686	13,833	19,935	14,482
North Dakota	32,120	24,387	21,441	18,650	14,027	21,973	26,000	21,258	19,924	12,908	—	11,964
Ohio	32,393	25,403	20,661	17,054	19,862	23,400	28,876	22,478	18,539	15,637	15,506	13,175
Oklahoma	31,302	25,875	22,304	17,921	14,813	21,506	28,417	23,290	18,696	15,131	13,667	15,928
Oregon	30,479	23,703	20,046	16,594	—	22,290	29,108	22,263	18,522	14,724	18,339	12,134
Pennsylvania	—	—	—	—	—	—	23,651	19,804	17,558	14,748	10,000	—
Rhode Island	31,396	24,552	21,097	13,971	—	—	35,968	25,593	19,471	17,260	20,392	23,863
South Carolina	34,960	25,927	20,758	16,203	16,416	16,262	23,418	18,994	15,845	12,965	—	14,235
South Dakota	26,331	21,767	18,523	15,819	14,381	15,827	22,912	19,505	16,690	13,578	—	14,343
Tennessee	28,124	21,377	17,987	15,419	—	—	28,773	21,950	17,541	14,523	14,527	15,544
Texas	33,877	26,463	21,987	17,850	17,532	22,066	30,066	23,068	19,291	14,951	17,000	15,895
Utah	32,686	24,484	20,410	16,441	16,727	20,623	20,892	15,070	17,705	11,448	—	—
Vermont	—	—	—	—	—	—	19,273	17,713	15,400	14,733	—	—
Virginia	—	—	—	—	—	—	24,071	19,213	17,485	13,939	10,500	11,500
Washington	32,805	25,333	21,167	17,354	20,419	24,300	28,412	23,024	18,983	16,553	13,457	—
West Virginia	28,237	23,358	19,641	15,874	11,538	—	21,518	19,291	16,250	14,557	—	—
Wisconsin	32,958	24,902	21,268	18,699	17,851	23,726	28,764	22,858	19,059	14,977	10,318	12,300
Wyoming	37,769	26,618	22,927	19,610	16,742	23,603	—	—	—	—	—	—
U.S. average	$32,617	$25,279	$20,943	$16,948	$17,148	$24,193	$32,403	$23,687	$19,240	$15,260	$17,642	$16,782

— No data

SOURCE: NATIONAL CENTER FOR EDUCATION STATISTICS

Academic Progress for New Mexico Athletes

Continued from Page 1

ers on the team must attend if their grade-point averages at New Mexico fall below 2.0 (out of a possible 4.0). Basketball players are required to attend if their averages fall below 2.5.

About half of the members of the basketball team and three-quarters of the football squad end up at the study table in a given year, says Thomas M. Brennan, the university's chief academic adviser for athletes.

A mixture of players from the baseball, soccer, tennis, and other men's varsity teams make up the balance of those who attend, Mr. Brennan says. Rarely do female athletes show up at the table, he adds, because their grades tend to be higher than those of males.

The University of New Mexico has only recently become serious about such things as study tables, tutors, and academic advisers for athletes.

Courses with No Work

Students, administrators, and faculty members here acknowledge that, until three years ago, varsity athletes were seldom encouraged to do more than the minimum academic work required to keep them eligible for sports.

Some coaches went so far as to arrange for players to enroll in courses in which they were required to do no work at all.

As a result, says Walt Arnold, a former New Mexico football and baseball player, "we didn't have too many players flunking out. If a guy was in trouble academically, you just took the easiest course you could find to bring your grades up. Nobody cared whether or not it would lead to a degree."

Mr. Arnold, now a tight end for the Los Angeles Rams, says he was more than three semesters short of graduation when, in 1979, he left the university after four years here. He now attends classes part time, in the off season, but does not expect to earn his degree (in physical education) until 1984.

Changes in NCAA Rules

Humorous stories about "dumb jocks" taking easy courses have been a part of the folklore of college sports for years. But the joke became a serious embarrassment for New Mexico and several other big-time-sports institutions in the fall of 1979, when documented stories began to spread about forged transcripts, unearned credits, and other academic irregularities involving college athletes and their coaches.

Those disclosures led to widespread calls for reform. The National Collegiate Athletic Association responded by tightening its rules for academic eligibility.

At its annual convention in January, 1981, the association voted to require athletes competing in N.C.A.A.-sponsored events to complete 12 credit hours a term. Until then, the N.C.A.A. required only that athletes make "satisfactory progress" toward a degree, leaving it up to sports conferences and individual colleges to define "satisfactory."

At the 1981 meeting, the N.C.A.A. members voted to require colleges to publish their standards for measuring students' academic progress and to prohibit athletes from enrolling in extension and credit-by-examination courses offered by other institutions.

Even before the N.C.A.A. overhauled its rules, many colleges had begun revising and tightening their academic policies for athletes.

Some major institutions—Arizona State University and the University of Southern California, for example—conducted internal investigations and adopted wide-ranging reforms after their problems were exposed in newspapers around the country. Other institutions whose names appear less frequently on the sports pages, such as Duquesne University, were prompted by the scandals at other colleges to raise their academic standards for athletes.

> **"I'm not arguing that we should change the system we have, but I do think there has been some overreaction. I think there is a happy medium somewhere that ought to be reached."**

The athletic department at New Mexico, the scene of one of the most notorious scandals, has since put into effect some of the most sweeping academic reforms in the N.C.A.A.

Still called "Lobogate" by the local news media (after New Mexico's mascot), the scandal resulted from a Federal Bureau of Investigation probe of gambling in the Albuquerque area. The investigators overheard a phone conversation in which an assistant basketball coach at New Mexico told Norm Ellenberger, the head coach, that he had arranged for a forgery of the junior-college transcript of a basketball player they had recruited.

The coaches were brought to trial in federal court for mail fraud and bribery, but the judge dismissed the charges, saying that such abuses were common in big-time college athletics and were best handled by the N.C.A.A.

Further investigations by the N.C.A.A. and a faculty committee at the university turned up numerous additional infractions. Six basketball players and one football player were found to have received credit for extension courses offered at a community college in California without having attended classes or done any work.

University 'Devastated'

The players, who claimed to have been unaware that they had been signed up for the bogus courses, were declared ineligible for the remainder of the 1979 season. The N.C.A.A. put the university on probation for three years and barred it from postseason competition in basketball for two years. The Western Athletic Conference ordered New Mexico to forfeit several of its 1979 basketball games.

"The whole episode just devastated this place," says Sidney Rosenblum, a professor of psychology who now chairs the faculty athletic council. "It did a great deal of damage to the integrity and the morale of this university."

The scandal reflected a general lack of concern on the campus about the academic accomplishments of athletes, Mr. Rosenblum says. To illustrate, he points with em-

Moves to Control Sports Abuses Eyed

Continued from Page 1

day, president of the University of North Carolina, have been active in both the A.C.E.'s and the A.A.U.'s plans to get the chief executives more involved.

Mr. Friday, who first raised the question of what the presidents should be doing at a meeting of the A.A.U. in April, said last week, "My interest is in getting the issue looked at seriously by the men in these particular institutions.

"I've been involved with enough of these things to know that it takes a lot of hard work and careful work to be fair and to be thorough in dealing with this subject."

All of the organizers of the American Council's meeting stressed the need for participation by presidents of institutions directly involved in big-time sports.

"The ones we need to get involved are the people who face the realities of the problem," Mr. Peltason said. "It's relatively easy to talk about changes if you don't have the day-to-day responsibility for bringing those changes into being."

Mr. Peltason and Mr. Ryan said last week that the list of university presidents who will attend the meeting had not been completed. However, Mr. Friday indicated it would include presidents of institutions in the Atlantic Coast Conference, the Big 10 Conference, and the Southwest Conference.

Sheldon Hackney, president of the University of Pennsylvania and chairman of an interassociation committee on intercollegiate athletics, is also scheduled to attend.

The efforts by the A.C.E. and the A.A.U. come after a group of presidents and coaches, meeting in Brunswick, Ga., agreed to push for tougher admissions standards for students who receive athletic scholarships (*The Chronicle*, June 2).

Scholarship athletes would be required take three years of high-school English and two years of mathematics with at least a C average, and would have to have a combined score of 700 on the Scholastic Aptitude Test or 15 on the American College Testing Program's examination.

The Brunswick meeting was organized by Fred C. Davison, president of the University of Georgia and of the College Football Association, an organization of 61 big-time-football powers.

The group's recommendations are to be presented at next January's meeting of the National Collegiate Athletic Association.

At least initially, the efforts of the A.C.E. and the A.A.U. will not include representatives of such groups as the N.C.A.A. or athletic directors.

The organizers of the A.C.E.-sponsored meeting said they believed the presidents themselves must assert their responsibility for managing the sports programs.

UNIVERSITY OF NORTH CAROLINA

William C. Friday

Court Tells NCAA to Release Papers Sought in Libel Suit

TOPEKA, KAN.

The Kansas Supreme Court has ordered the National Collegiate Athletic Association to turn over 15 documents from its recruitment-investigations file to the Birmingham, Ala., *Post-Herald* so that the newspaper can defend itself in a libel suit.

The *Post-Herald* is being sued for $6.9-million by Edward Seal, principal of Butler High School in Huntsville, Ala. The newspaper reported last summer that Mr. Seal had paid Bobby Lee Hurt, a star basketball player, to play on Butler's team after he threatened to transfer to another school. The payments, according to the *Post-Herald*, were made from gate receipts and revenues from soft-drink machines.

The Kansas Supreme Court's 5-to-2 decision modified a lower court's ruling that the newspaper be given the entire N.C.A.A. file.

The N.C.A.A. argued that the file contained, in addition to information concerning Mr. Hurt, confidential documents of no relevance to the newspaper's case.

The *Post-Herald* also reported that Mr. Hurt, now a student at the University of Alabama, had been pressured into attending Alabama by an alumnus to whom he owed money for a car. Mr. Hurt, it reported, had committed himself to another university, but signed with Alabama at the last minute. Mr. Hurt has filed his own libel suit against the newspaper for $800,000 in damages.

Universities that Supply Most Players to National Basketball Association

Rank	Institution	Conference	Alumni in NBA in 1981
1.	Indiana U.	Big 10	9
1.	U. of North Carolina	Atlantic Coast	9
1.	U. of Cal. at Los Angeles	Pacific 10	9
4.	Notre Dame U.	Independent	7
5.	U. of Maryland	Atlantic Coast	6
5.	U. of South Carolina	Independent	6
7.	Arizona State U.	Pacific 10	5
7.	U. of Detroit	Independent	5
7.	U. of Michigan	Big 10	5
7.	U. of Minnesota	Big 10	5
7.	U. of San Francisco	West Coast Athletic	5
12.	U. of Iowa	Big 10	4
12.	U. of Kentucky	Southeastern	4
12.	Marquette U.	Independent	4
12.	Oregon State U.	Pacific 10	4
12.	U. of Southern California	Pacific 10	4
12.	U. of Utah	Western	4
12.	U. of Washington	Pacific 10	4
19.	U. of Alabama	Southeastern	3
19.	Central Michigan U.	Mid-American	3
19.	DePaul U.	Independent	3
19.	Duke U.	Atlantic Coast	3
19.	U. of Houston	Southwest	3
19.	U. of Kansas	Big 8	3
19.	Cal. State U. at Long Beach	Pacific Coast	3
19.	Michigan State U.	Big 10	3
19.	U. of Nevada at Las Vegas	Independent	3
19.	North Carolina State U.	Atlantic Coast	3
19.	Ohio State U.	Big 10	3
19.	Rutgers State U.	Eastern	3
19.	St. John's U. (N.Y.)	Eastern College	3
19.	U. of Tennessee	Southeastern	3
19.	Villanova U.	Independent	3

Rank	Conference	Total number of alumni in NBA	Average number of alumni per institution
1.	Big 10	33	3.3
1.	Pacific 10	33	3.3
3.	Atlantic Coast	25	3.1
4.	Southeastern	18	1.8

SOURCE: DEPARTMENT OF GEOGRAPHY, EASTERN MICHIGAN UNIVERSITY

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News Summary

Articles on inside pages

John B. Slaughter will relinquish the directorship of the National Science Foundation to become chancellor of the University of Maryland at College Park. Story on Page 13.

Scientific literacy would improve if more science and mathematics courses were required of students majoring in other subjects, educators and scientists agreed at a recent meeting. Story on Page 8.

The Commonwealth Association of Students in Pennsylvania is considered one of the best-organized and most effective statewide student groups. Story on Page 6.

Plans to dismantle academic programs at the University of Missouri at Columbia have been shelved—at least for the time being. Story on Page 11.

Students with just two years of college behind them would be able to enter Harvard University's medical school under a recently proposed pilot program. Story on Page 12.

Two universities have taken the National Collegiate Athletic Association to court for allegedly depriving them of their rightful share of revenues from televised football games. Story on Page 10.

The Education Department says it can't meet its deadlines for resolving discrimination complaints against colleges and universities. Story on Page 13.

A moving force in the field of family history, Tamara Hareven, has just written a new study on the subject, *Family Time and Industrial Time*. Story on Page 19.

Israel's invasion of Lebanon has sparked student demonstrations at an Arab university on the occupied West Bank of the Jordan River. Story on Page 17.

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High Court Rejects Case of Professor Jailed for Not Revealing Tenure Vote

Contempt citation against Georgia's Dinnan allowed to stand; 2 similar cases pending

By CHERYL M. FIELDS

WASHINGTON

The Supreme Court refused last week to review the contempt-of-court conviction of James A. Dinnan, a University of Georgia professor who went to jail rather than reveal how he had voted in a tenure case.

The Court let stand without comment a ruling by the U.S. Court of Appeals for the Eleventh Circuit that the right to academic freedom must be limited by other societal goals and that the confidentiality of tenure decisions "cannot be used to give an institution of higher learning *carte blanche* to practice discrimination."

It was not known last week whether Mr. Dinnan would be asked again to reveal his tenure vote in further legal proceedings.

Mr. Dinnan, a professor of adult education and reading at Georgia, said in an interview with *The Chronicle* that he was disappointed, but that "eventually the Supreme Court will have to handle the question of peer review, since various other cases raising the same issue are winding their way through the courts."

"Eventually, if reason prevails, I think the concept of peer review by an academic community will stand."

At least two other cases raising similar issues are now in the federal courts:

The U.S. Court of Appeals for the Second Circuit heard arguments recently in a case in which a faculty member who was denied tenure at Fiorello H. La Guardia Community College is appealing a district court's decision barring him from finding out how individual members of his tenure committee voted.

The Supreme Court has not yet announced whether it will review a case in

Continued on Page 12, Column 1

WIDE WORLD

James A. Dinnan

States Warned Against Excessive Reliance on Tax-Exempt Bonds for Student Loans

By JANET HOOK

ST. PETERSBURG, FLA.

The use of tax-exempt state bonds to finance student loans—now approved in at least 10 states and under consideration in several others—may not be the "utopian solution" that some legislators believe it to be, higher-education officials have warned.

The bonds may be an important source of assistance to middle-income students who cannot get federal Guaranteed Student Loans because of new limits on eligibility, they say, but may benefit students at only a limited number of institutions—and not necessarily those colleges that need help the most.

At a time when the Reagan Administration is seeking new restrictions on the use of tax-exempt bonds, some college officials are wary of relying on them as an alternative source of student-loan money.

Bills setting up new bond authorities sailed through legislatures this year with little opposition.

'Loan-Authority Fever'

"You might call it 'loan-authority fever,' " said Joseph M. Cronin, president of the Massachusetts Higher Education Assistance Agency and chairman of a group that is monitoring the development of alternative loan programs.

Tax-exempt bonds have been regarded by some state legislatures as "a utopian solution to the problem of making credit available," Mr. Cronin said, because they provide a "state safety net" for students facing the loss of federal aid, and they require no outlay from state coffers.

Several other state legislatures are considering similar measures, Mr. Cronin said this month at a joint meeting here of the National Council of Higher Education Loan Programs—an association of agencies that administer the federal guaranteed-loan program in the states—and the National Association of State Scholarship and Grant Programs.

The pressure to approve alternative loan programs quickly has eased somewhat, Mr. Cronin said, because it seems less likely now that deep cuts will be made in the federal student-aid budget this year. However, student-aid officials here were warned that Guaranteed Student Loans

Continued on Page 14, Column 1

Coaches Ask Penalties for Colleagues Caught Cheating

By JOHN A. CROWL

DALLAS

At the instigation of several prominent coaches in big-time football, the National Collegiate Athletic Association will be asked to consider imposing stiff penalties on coaches and athletes who deliberately violate certain association rules.

To the surprise of many of the athletic directors and faculty representatives at the annual meeting of the College Football Association here, the organization's coaches' committee, headed by Vince Dooley of the University of Georgia, proposed the tough resolution.

"We recommend," Mr. Dooley said, "that any coach be suspended from coaching at all N.C.A.A. institutions for at least one year without pay for any of the following violations with regard to players or prospective players: illegal cash payments, gifts, loans, annuities, sale of players' tickets for more than their face value, or any other violations of a deliberate or extremely serious nature.

"If the violation occurs with the knowledge of the coach but without his direct involvement—in other words, he turns his head—he still would be subject to the one-year suspension without pay.

"Any athlete found knowingly guilty of accepting substantial illegal inducements would be declared permanently ineligible for further N.C.A.A. competition."

When one delegate observed that the penalties for athletes seemed stiffer than those for coaches, Tom Osborne, head

Continued on Page 10, Column 1

Higher academic standards for athletes were endorsed by the College Football Association. Story on Page 10.

Colleges Urged to Improve Science Courses for Non-Science Majors

By KIM McDONALD

RACINE, WIS.

Seeking to combat a serious decline in scientific literacy, more than 50 education and business leaders meeting here urged college administrators and faculty members to work to improve science and technology courses for students majoring in other fields.

"Liberal education is a failed idea as long as our students are shut out of, or only superficially acquainted with, knowledge of the kinds of questions science can answer and those it cannot," David S. Saxon, president of the University of California, told the meeting of educators, scientists, and administrators. He added that "watered-down versions of regular science courses, such as 'Physics for Poets' or 'Astronomy for Lovers,' are as offensive and insulting as would be 'Poetry for Physicists.' "

Participants in the three-day meeting sponsored by the Association of American Colleges and the American Association for the Advancement of Science sought to make recommendations that colleges and universities could follow in improving their science, mathematics, and engineering courses for students not majoring in those fields.

Mr. Saxon said any course of study in the sciences should help students understand physical laws, provide instruction in statistics and probability, and "convey the idea that science is not a collection of isolated facts, but a highly unified and consistent view of the world."

A National Academy of Sciences study released earlier this year found that the average liberal-arts or non-science major devoted only 7 per cent of his or her college course load to science.

'Willy-Nilly' Choices

Such students often get "inadequate teaching that stresses dull lecturing more often than exciting laboratory experiments and demonstrations," the report said, and "are often allowed to choose willy-nilly from an ever-growing cafeteria offering 'topics courses' that rarely fit into a well-conceived, comprehensive pattern of education."

Participants in the meeting here generally agreed that introductory courses covering the basic principles of science, mathematics, computers, and engineering should also deal with the ethical and moral questions raised by technology.

Some said those courses should be given in the freshman and sophomore years, when the pressure to complete requirements in students' majors are least intense. Students who fulfill their mathematics requirements by examination should be required to enroll in advanced mathematics courses, they said.

UNIVERSITY OF CALIFORNIA

David S. Saxon

Special programs to improve the understanding of science and technology among non-science majors at Lehigh University, the Massachusetts Institute of Technology, Stanford University, and Syracuse University were cited as models for other universities.

Participants in the meeting emphasized that developing new courses for students not majoring in science and improving the way they are taught would cost universities money and require a strong commitment from their faculty members.

Further Recommendations

In addition, they agreed that:

▶ Colleges and universities should require their students to take a minimum of 10 per cent of their courses in science and technology. Herman R. Branson, president of Lincoln University in Pennsylvania, said he thought the percentage should be greater because most students already take about that amount.

▶ To counteract the view, common among science faculty members, that teaching students who don't major in science is a waste of their time, colleges should reward professors who teach such courses with grants, salary increases, or other incentives.

▶ Colleges should require graduate students to help teach courses for non-science majors, under the close supervision of a faculty member. That would help to produce future faculty members with more experience in teaching such students.

▶ Senior faculty members, rather than administrators or junior faculty members, should develop the courses and programs for non-science majors.

▶ Instructors for the basic courses should avoid taking "elitist or authoritarian postures," and should encourage discussion instead of teaching "a set of hard-and-fast facts."

▶ Colleges should encourage students to take more science and mathematics courses in high school by making available—and, in some cases, strengthening—their admissions requirements in those areas. Many institutions do not publish those requirements now, participants said.

▶ College presidents and chief academic officers should encourage faculty members to improve the way they teach science and technology courses to make those subjects more attractive to students majoring in other fields.

Top administrators should also find a way to insure continued attention to the science-and-technology curriculum, perhaps by appointing a standing committee or a dean.

▶ Institutions that do not have engineering schools could improve teaching in technical courses for non-science majors by giving the faculty members who teach them leaves of absence to work in industry. Colleges could use specialists from industry as teaching aides and guest lecturers.

▶ Professional organizations, such as the American Association for the Advancement of Science, should focus national attention on scientific illiteracy and encourage government agencies and private foundations to help solve the problem. Associations should use their journals, meetings, and symposia to help colleges and faculty members design courses for non-majors.

Robert E. Wolverton, vice-president for academic affairs at Mississippi State University, reminded the meeting that even if all four-year institutions adopted the group's recommendations, problems would remain.

At many state institutions, such as his own, more than half of the students enter with junior-college degrees, Mr. Wolverton said, and "there's no way I can impose this on any of them."

Mark H. Curtis, president of the Association of American Colleges, said his organization was working on a list of minimum curriculum requirements that could be used by accrediting organizations in certifying bachelor's-degree programs.

He also said the A.A.C. would send a booklet containing the final recommendations from the meeting to all two-year and four-year institutions this fall.

FACT-FILE

Tenure Rates for Full-Time Faculty Members in 1981-82 and Change from Previous Year

	All institutions		Universities		Other 4-year institutions		2-year institutions	
	1981-82	Change	1981-82	Change	1981-82	Change	1981-82	Change
Public institutions								
Professors	96.3%	−0.1%	96.9%	+0.3%	95.5%	−0.5%	98.0%	+0.7%
Men	96.4%	0.0%	97.0%	+0.3%	95.5%	−0.6%	97.9%	+0.9%
Women	95.7%	0.0%	95.1%	+0.1%	95.3%	−0.1%	98.4%	+0.1%
Associate professors	84.5%	−0.7%	84.9%	−0.7%	82.4%	−0.8%	92.9%	+0.7%
Men	84.4%	−0.8%	84.8%	−0.9%	82.5%	−0.8%	93.2%	+0.3%
Women	85.0%	0.0%	85.8%	+0.6%	82.0%	−0.9%	92.2%	+1.4%
Assistant professors	32.0%	−0.4%	17.1%	−1.0%	35.5%	−0.1%	61.6%	+1.7%
Men	30.1%	−0.4%	14.8%	−1.0%	34.6%	−0.4%	63.9%	+2.6%
Women	35.6%	−0.4%	22.5%	−1.1%	36.9%	+0.2%	58.3%	+0.4%
Instructors	12.3%	−0.4%	5.9%	−0.9%	10.2%	−0.6%	22.6%	+0.4%
Men	13.3%	−0.5%	5.5%	−1.1%	11.1%	−0.6%	24.7%	+0.9%
Women	11.4%	−0.5%	6.1%	−0.8%	9.6%	−0.5%	20.7%	0.0%
Lecturers	2.6%	−0.5%	3.7%	−0.8%	0.1%	0.0%	26.8%	+3.8%
Men	3.2%	−0.7%	5.3%	−1.2%	0.2%	0.0%	21.1%	+2.9%
Women	2.0%	−0.3%	1.9%	−0.2%	0.0%	0.0%	29.7%	+4.7%
No academic rank	78.8%	+0.6%	1.0%	+0.3%	29.7%	+5.1%	80.6%	+0.5%
Men	81.9%	0.0%	1.5%	+0.4%	33.6%	+5.3%	83.8%	0.0%
Women	73.3%	+1.8%	0.0%	0.0%	22.7%	+4.6%	75.0%	+1.6%
All ranks	68.1%	+0.3%	66.1%	−0.3%	65.2%	+0.3%	76.3%	+1.1%
Men	72.8%	+0.2%	71.2%	−0.2%	70.6%	+0.2%	80.4%	+0.9%
Women	54.7%	+0.7%	43.7%	+0.1%	49.9%	+0.4%	69.3%	+1.6%
Private institutions								
Professors	94.0%	−0.1%	96.6%	−0.4%	92.3%	0.0%	82.7%	−0.4%
Men	94.2%	−0.2%	96.8%	−0.3%	92.4%	−0.1%	85.2%	−3.5%
Women	91.6%	+0.3%	94.1%	−1.3%	91.5%	+0.6%	77.1%	+6.3%
Associate professors	74.1%	−0.6%	75.6%	−0.8%	73.3%	−0.6%	81.6%	−0.6%
Men	74.3%	−0.9%	76.0%	−0.7%	73.4%	−1.0%	80.9%	−6.6%
Women	73.5%	+0.6%	73.9%	−0.9%	73.1%	+0.8%	82.8%	+9.3%
Assistant professors	16.1%	−0.6%	10.0%	−0.9%	18.3%	−0.5%	32.4%	−6.2%
Men	15.2%	−0.8%	9.0%	−0.9%	17.6%	−0.8%	35.3%	−6.7%
Women	17.7%	−0.4%	11.9%	−1.3%	19.4%	−0.1%	28.6%	−6.1%
Instructors	2.8%	0.0%	3.1%	−0.2%	2.6%	+0.2%	7.1%	−3.2%
Men	3.0%	−0.4%	2.5%	−1.2%	3.1%	0.0%	5.2%	−4.3%
Women	2.6%	+0.3%	3.8%	+0.8%	2.1%	+0.4%	8.6%	−2.2%
Lecturers	1.5%	−0.3%	1.7%	−0.1%	1.1%	−0.5%	0.0%	0.0%
Men	1.8%	−0.5%	1.8%	−0.3%	2.0%	−1.0%	0.0%	0.0%
Women	1.1%	0.0%	1.5%	−0.1%	0.0%	0.0%	0.0%	0.0%
No academic rank	47.9%	−1.3%	0.0%	−1.1%	48.4%	−0.3%	55.0%	−3.1%
Men	51.6%	−2.5%	0.0%	0.0%	52.7%	+0.5%	57.1%	−6.6%
Women	41.1%	+1.1%	0.0%	−2.3%	39.4%	−1.5%	51.1%	+2.8%
All ranks	55.7%	−0.1%	60.8%	−0.2%	53.4%	0.0%	49.2%	−4.2%
Men	61.3%	−0.3%	67.0%	−0.2%	59.4%	−0.2%	54.3%	−6.8%
Women	37.6%	+0.5%	35.8%	+0.3%	38.1%	+0.7%	41.9%	−0.5%

Note: Data are for full-time faculty members at institutions in the 50 states and District of Columbia reporting tenure information for both 1980-81 and 1981-82.

SOURCE: NATIONAL CENTER FOR EDUCATION STATISTICS

Syracuse's Technology Program Called a Model for Others

RACINE, WIS.

Plans for a new program to be offered at Syracuse University next fall provide a model that other universities could use in improving their undergraduate science courses for students majoring in other fields, said business and education leaders meeting here.

Michael Flusche, associate dean of arts and sciences at Syracuse, presented an outline of the program at the meeting, which was called to discuss ways to improve the scientific and technical literacy of non-science majors.

In the program at Syracuse, a "technology cluster" of four one-semester courses will include study of a laboratory science, basic principles of engineering and design, and social and moral questions raised by technology.

Using Microprocessors

Completion of the four courses will satisfy the natural-science requirements for undergraduates in the university's divisions of arts and sciences, communications, education, and social work.

Students will first have to complete a sequence of two one-semester courses in a laboratory science, chosen from offerings in biology, chemistry, geology, and physics.

They will then take a course in technology, which will introduce concepts of engineering design by using microprocessors—the tiny "thinking" elements of computers—and will examine ways engineers solve problems and make decisions. The students will also be taught how technology applies to the fields in which they completed the laboratory-science requirement.

For example, students who take the basic-biology sequence will study biotechnology, which includes biomedical engineering, cloning, genetic screening, pharmacology, and recombinant-DNA techniques.

Social Issues Introduced

The final course, which will be taught by both social-science and science faculty members, will introduce students to social issues raised by new developments in technology. For the students taking the biology sequence, those will include ethical problems in genetic engineering, the implications of patenting new life forms, the definition of when life begins, and chemical health hazards.

Mr. Flusche said the sequence would enable students to see the relevance of the initial science and engineering courses to the course on social problems.

The liberal-arts "core" curriculum at Syracuse, of which the technology cluster is a part, was developed using grants from the Andrew W. Mellon Foundation and the National Endowment for the Humanities.

Mr. Flusche said the Alfred P. Sloan Foundation had given the university $200,000 for three years to develop the technology portion—or third semester—of the technology cluster. Most of that money will be used for the salaries of faculty members.

—K.M.

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News Summary

Articles on inside pages

David A. Hamburg, professor of health policy and management at Harvard University, will succeed Alan Pifer as head of the Carnegie Corporation of New York. Story on Page 3.

Vartan Gregorian wants to re-establish the New York Public Library as "a living educational and cultural institution." Story on Page 6.

The Research Libraries Group is expecting a respite from its recent technical and financial problems, according to Edward E. Shaw, its outgoing president. Story on Page 8.

Plans for the American Open University will be shelved when the University of Mid-America goes out of business this year. Story on Page 8.

A budget proposal passed by the House of Representatives would provide less money for student loans than a similar measure approved by the Senate. Story on Page 11.

Edward A. Curran has been forced to resign as director of the National Institute of Education after a controversial nine-month term. Story on Page 11.

Scholars who "referee" manuscripts submitted to scientific journals are often biased against colleagues from less prestigious institutions. Story on Page 19.

Fellowships or grants have been awarded to more than 200 scholars by the American Council of Learned Societies. List of winners on Page 27.

The American University of Beirut has thus far escaped serious damage in the war in Lebanon. Two universities in Israel report that as many as a fourth of their students have been called up to fight. Stories on Page 17.

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Title IX at X

While celebrating the anniversary, civil-rights and women's groups vow to fight any new moves to narrow federal rules against sex bias

By CHERYL M. FIELDS
WASHINGTON

Ten years ago:

▶ At least three women were teaching at prestigious colleges and universities without compensation—either because the colleges said they could not afford to pay them, or because their husbands were employed at the institutions and policies against nepotism forbade the women's employment.

▶ Female applicants were required to have higher Scholastic Aptitude Test scores than males to be admitted to many colleges and universities.

▶ There were no athletic scholarships for women.

▶ The widely used Strong Vocational Interest Blank had separate scoring systems for males and females—and pink tests for girls emphasizing "female" occupations and blue tests for boys dealing with "male" fields such as medicine and science.

All that has changed today, 10 years after the enactment of Title IX of the Education Amendments of 1972, which bars sex bias in federally assisted education programs or activities.

Colleges and universities have dropped the written and unwritten nepotism policies that kept husbands and wives from being employed by the same departments, or sometimes even the same institutions.

Title IX's ban on sex bias in admissions to graduate, professional, vocational, and public undergraduate education has ended higher academic requirements for female students and led to greatly increased numbers of women in medical, law, dental, and business schools.

More than 10,000 college scholarships were awarded to female athletes in 1981, and the Strong Vocational Interest Blank now uses one scoring system and one test form for both sexes.

Impact Far-Reaching

The impact of Title IX since it was enacted on June 23, 1972, has been far-reaching, and last week the National Coalition for Women and Girls in Education, an organization of 50 women's, civil-rights, and educational groups, staged a celebration of that fact at the Capitol here. They also pledged to fight any moves by the Reagan Administration to narrow the coverage of the act.

Edith Green, then Democratic Representative from Oregon and chairman of the House Special Subcommittee on Education, held hearings in 1970 that documented extensive discrimination in the way women were treated both in school and on the job. The hearings led to the passage of Title IX two years later—and to 10 years of controversy over it.

Although the statute also bars bias in such areas as admissions, counseling, employment, and student aid, much of the attention it has attracted in the last decade stemmed from its application to intercollegiate athletics—not surprising, since, at the time of its passage, some major football and basketball powers spent millions of dollars every year on men's intercollegiate sports and next to nothing on women's. (In 1974, for example, the average annual budget for women's sports in the Big 10 was $3,500.)

> **"It's clear that some areas have changed a lot and some hardly at all."**

Donna Brazile, field coordinator of the National Student Educational Fund, recalled recently that when she entered high school in 1973, she and other girls interested in playing basketball had to beg a physical-education teacher to coach them. Her high school, in a suburb of New Orleans, did agree to set up girls' basketball, volleyball, and softball teams, but they had to share one set of uniforms. One team sometimes had to cancel a scheduled game because another team needed the uniforms that day.

Still, the girls at her high school won the state basketball championships three years in a row and, as she put it, "moved from the back of the local newspaper's sports section to the front page."

By the time Ms. Brazile enrolled in Louisiana State University, she received a scholarship for basketball and track.

"But even in college," she said, "if the women were using the gym in the afternoon and the men needed to practice, the women had to get off the court. Or if the men had a game scheduled, we'd have to stop ours."

Recent investigations by the Education Department's Office for Civil Rights have found that at some universities, women's sports lag behind men's in such areas as scholarships, locker-room and practice facilities, travel, and promotion.

Under a new policy of "conciliation" and "nonconfrontation" begun last year by Education Secretary Terrel H. Bell, the civil-rights office has found the institutions in compliance with the law once they've promised to rectify the deficiencies.

Pervasive Effect on Athletics

Despite the continuing problems, Title IX has had a pervasive effect on intercollegiate athletics. By 1980, women made up 30 per cent of the participants in intercollegiate athletics, compared with 15 per cent before the enactment of Title IX.

One of the major fears expressed by men's athletic directors during the past decade was that Title IX would siphon money away from well-established men's programs, forcing administrators to skimp on men's teams or drop some sports.

But, in spite of pressure from the National Collegiate Athletics Association, the College Football Association, and some university presidents, Congress has ignored continued pleas to amend Title IX to exclude, explicitly, "revenue producing" sports from its coverage—or to omit such sports from the coverage of regulations that the Office for Civil Rights drafted to carry out the law.

According to estimates prepared by the Association for Intercollegiate Athletics for Women, universities that belonged to Division I of the N.C.A.A. spent an average of $1.2-million on their men's intercollegiate-athletics programs in 1973-74 and an average of $27,000 on their women's programs the same year. By 1981-82, the aver-

Continued on Page 12, Column 1

FACT–FILE

Trends in Higher Education

Enrollment, staff, and degrees in 50 states and D.C.

	1970-71	1980-81	Change, 1970-71 to 1980-81	Projected for 1990-91	Projected change, 1980-81 to 1990-91
College-age population †					
18-24 years old	24,687,000	29,463,000	+ 19%	25,148,000	– 15%
25-34 years old	25,293,000	36,172,000	+ 43%	41,086,000	+ 14%
35-44 years old	23,142,000	25,721,000	+ 11%	36,592,000	+ 42%
Enrollment					
Total	8,581,000	12,097,000	+ 41%	12,101,000	0%
Public institutions	6,428,000	9,457,000	+ 47%	9,616,000	+ 2%
Private institutions	2,153,000	2,640,000	+ 23%	2,485,000	– 6%
4-year institutions	6,358,000	7,571,000	+ 19%	7,101,000	– 6%
2-year institutions	2,223,000	4,526,000	+104%	5,000,000	+ 10%
Men	5,044,000	5,874,000	+ 16%	5,770,000	– 2%
Women	3,537,000	6,223,000	+ 76%	6,331,000	+ 2%
Full time	5,815,000	7,098,000	+ 22%	6,536,000	– 8%
Part time	2,766,000	4,999,000	+ 81%	5,565,000	+ 11%
Undergraduate	7,376,000	10,475,000	+ 42%	10,334,000	– 1%
Graduate	1,031,000	1,343,000	+ 30%	1,437,000	+ 7%
First professional	175,000	278,000	+ 59%	330,000	+ 19%
Full-time equivalent	6,737,000	8,749,000	+ 30%	8,428,000	– 4%
Higher-education staff					
Instructional staff	573,000	846,000	+ 48%	799,000	– 6%
Full-time equivalent	451,000	624,000	+ 38%	589,000	– 6%
Earned degrees ‡					
Bachelor's	840,000	932,000	+ 11%	922,000	– 1%
Men	476,000	470,000	– 1%	452,000	– 4%
Women	364,000	462,000	+ 27%	470,000	+ 2%
First professional	38,000	72,000	+ 89%	74,000	+ 3%
Men	36,000	54,000	+ 50%	52,000	– 4%
Women	2,000	18,000	+800%	22,000	+ 22%
Master's	231,000	298,000	+ 29%	303,000	+ 2%
Men	138,000	148,000	+ 7%	151,000	+ 2%
Women	92,000	150,000	+ 63%	152,000	+ 1%
Doctor's	32,000	33,000	+ 3%	33,000	0%
Men	28,000	23,000	– 18%	18,000	– 22%
Women	5,000	10,000	+100%	15,000	+ 50%

Note: Because of rounding, details may not add to totals.
† Population projections are all Series II projections from the Bureau of the Census.
‡ Projected in 1980-81.

SOURCE: NATIONAL CENTER FOR EDUCATION STATISTICS

Nursing Enrollment Drops 5 Pct. in 2 Years

WASHINGTON

The number of full-time students enrolled in four-year nursing programs declined by 5 per cent in the past two years, the American Association of Colleges of Nursing has reported.

Even more serious, the association said, was a two-year decline of 6.5 per cent in full-time enrollment in master's-degree programs. The greatest shortage of nurses is among those prepared at the graduate level, the association said.

The association's survey of enrollment in nursing programs found an increase in enrollment of part-time students, particularly of registered nurses seeking bachelor's degrees in nursing.

In master's-degree programs in 1981-82, enrollment of part-time students was up by nearly 30 per cent from 1979-80, while the number of graduates at the master's level rose by 11.4 per cent.

In four-year programs, part-time enrollment rose 43 per cent in two years, but the number of those graduating in 1981-82 was only 2 per cent higher than it had been two years earlier.

The report was based on data from 205 colleges of nursing, which had responded to comparable surveys for the past three years.

"The shift of master's students from full-time to part-time study that was experienced in the fall of 1981 can be related to economic conditions in general and specifically to reduction in federal assistance for advanced nurse training," the association said.

Because of the longer time required for part-time students to complete requirements, it said, a decrease in the number of graduates can be predicted for the next few years.

Appropriations for Colleges in 22 States Up 6 Pct.

Twenty-two states that have appropriated funds for higher education in 1982-83 have provided 6 per cent more money than in they did in 1981-82, according to data compiled by M. M. Chambers, professor of educational administration at Illinois State University.

The increase is smaller than the same 22 states recorded in recent years. For example, their combined appropriations are up 20 per cent compared with appropriations of the same states two years ago and are up 210 per cent from their appropriations 10 years ago, Mr. Chambers said.

The appropriations reported by Mr. Chambers do not include local or federal funds, but do include state money for student-aid programs and higher-education boards as well as for the operation of colleges and universities.

In some cases, the amounts appropriated for higher education may be reduced by action of governors or by laws that prorate funds according to revenues.

	Appropriations for 1982-83	1-year change	2-year change	10-year change
Arizona	$322,525,000	+ 5%	+15%	+186%
Georgia	534,219,000	+ 7%	+24%	+200%
Idaho	104,019,000	+ 9%	+10%	+183%
Indiana	485,285,000	+ 1%	+ 6%	+130%
Iowa	381,112,000	+12%	+20%	+204%
Kansas	312,023,000	+12%	+20%	+235%
Kentucky	363,614,000	+ 2%	+18%	+195%
Maine	71,915,000	+ 8%	+15%	+114%
Maryland	432,654,000	+12%	+18%	+172%
Minnesota	520,920,000	– 5%	+ 9%	+199%
Nebraska	189,610,000	+ 1%	+14%	+234%
Nevada	71,929,000	+ 9%	+16%	+248%
New Mexico	184,084,000	+ 7%	+28%	+261%
North Dakota	108,539,000	+ 3%	+43%	+295%
Ohio	846,331,000	+15%	+18%	+178%
Oregon	240,519,000	– 5%	– 4%	+125%
South Dakota	53,503,000	+ 3%	0%	+ 58%
Texas	2,035,534,000	+ 7%	+39%	+339%
Vermont	37,691,000	+11%	+24%	+125%
Virginia	616,475,000	+13%	+21%	+232%
Washington	497,822,000	0%	+ 6%	+161%
West Virginia	193,137,000	+ 1%	+14%	+148%
22 states	$8,603,460,000	+ 6%	+20%	+210%

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News Summary

Articles on inside pages

It's no company union, but the Professional Staff Congress of the City University of New York manages to maintain a cooperative relationship with the university administration. Story on Page 6.

A dispute in the Chicano-studies department at California State University at Los Angeles has given rise to a growing number of violent incidents. Story on Page 8.

The University of Chicago should not cut back its graduate programs in the face of shrinking enrollment, a faculty panel has recommended. Story on Page 8.

In the 1980's, higher education will be vulnerable to the triple threat of a depressed economy, lower public appropriations, and a smaller pool of 18-year-olds. Part IV of the Minter-Bowen series appears on Page 9.

"Bear" Bryant, of the University of Alabama, is better paid than any other coach in college football. Story on Page 13.

A proposal to trim $665-million from the student-loan program over the next three years was among more than 70 budget alternatives debated by the House of Representatives last week. Story on Page 15.

The Supreme Court has taken action on three more cases involving sex discrimination in education. Story on Page 15.

Archibald MacLeish, the poet and dramatist who died on April 20, may be the subject of renewed critical interest. Story on Page 21.

A black political prisoner in South Africa is one of three candidates for the chancellorship of the predominantly white University of the Witwatersrand. Story on Page 19.

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AAUP's Dilemma: Can Rules on Dismissals of Professors Survive Fiscal Distress?

Layoffs of tenured faculty members may be at once 'unthinkable' and 'inevitable'

By ROBERT L. JACOBSON

WASHINGTON

Pressure is developing in the American Association of University Professors for a new look at its longstanding edict against the dismissal of tenured faculty members.

Discussions on the subject reflect virtually no support for the elimination or weakening of tenure itself or its role in protecting academic freedom. But there is growing sentiment for examining whether the association's ground rules on dismissals are entirely appropriate or adequate in the face of higher education's deepening financial problems.

Even some staunch supporters of academic freedom and tenure are beginning to question whether the profession is best served by prohibiting layoffs of tenured faculty members until "the institution as a whole" has reached such dire financial straits that its very survival is threatened.

"The tenure principle must at all cost be preserved."

That is the policy advocated by the A.A.U.P. in its widely followed *Recommended Institutional Regulations on Academic Freedom and Tenure.*

The recommendations also allow colleges to end tenured appointments on "educational" grounds, but only when faculty members have determined that an entire program or department must be formally discontinued for the sake of the institution's overall mission.

Some A.A.U.P. members now concede, however, that higher education's widespread fiscal distress may call for a broader approach.

Many suggestions to that effect were made here recently at an invitational conference sponsored by the A.A.U.P. on the role of faculty members in "hard times." About 45 faculty members, college administrators, and representatives of national organizations in higher education attended the three-day meeting.

Officially, the A.A.U.P. remains firmly committed to the doctrine that tenured professors cannot be dismissed on financial grounds except as a last resort—and then only "under extraordinary circumstances because of a demonstrably bona fide financial exigency."

Nor has the association taken any formal steps that could be viewed as softening its resolve to protect tenured professors from overly selective layoffs or dismissals on educational grounds. But in the context of what some observers call the worst times for academe since the Great Depression, the possibility of revising some key A.A.U.P. policies on tenure is being reluctantly but seriously considered.

"I think many in A.A.U.P. have a problem" with the recommended regulations, said Harold Goldwhite, a leader of the association's statewide affiliate in California.

James C. Garland, chairman of a faculty committee that has studied the tenure issue at Ohio State University, said the panel had experienced "a lot of trouble" with the A.A.U.P.'s guidelines. He told the conference here that the latest proposal to define financial exigency at Ohio State was centering on its ability to survive "as an institution of excellence"—a concept that is not specifically addressed in the A.A.U.P.'s document.

"There are times when a tenured person should be the one to go."

Another faculty participant at the meeting here, who asked not to be identified,

Continued on Page 14, Column 1

Sports Figures Urge Higher Entrance Standards for Students Who Get Athletic Scholarships

By JOHN A. CROWL

Some prominent figures in big-time college sports are throwing themselves behind a movement to tighten academic standards for students on athletic scholarships.

Four university presidents were in a group of 14 people from 11 institutions of higher education, the Big 8 athletic conference, and the College Football Association who met last month in Brunswick, Ga., and agreed to press the National Collegiate Athletic Association to require the following standards for entering student athletes who receive financial aid:

▶ Three years of high-school English and two years of mathematics, with at least a C average, plus an overall high-school average of at least C.

▶ A combined score of 700 on the Scholastic Aptitude Test or 15 on the American College Testing Program's examination.

The other members of the group were coaches and athletic directors from big-time sports powers, including Joe Paterno, football coach at Pennsylvania State University, and Bobby Knight, basketball coach at Indiana University.

The group urged that its proposals go into effect at the beginning of the 1985-86 academic year.

Under present N.C.A.A. rules, students need have only a C average in high school to be eligible for athletic grants-in-aid. Although a number of institutions have stiffer requirements, their standards are often waived in order to compete for the best high-school athletes.

The board of the Association for Intercollegiate Athletics for Women is expected to vote this week to suspend the organization's activities. See story on Page 13.

The Brunswick group, which has become known as the "Georgia seminar," met at the invitation of Fred C. Davison, president of the University of Georgia. Mr. Davison is also president of the College Football Association, an organization of 61 major football powers.

Seminar members said they would propose legislation at next January's N.C.A.A. meeting to tighten academic standards. Further, they said, if the N.C.A.A. rejects their proposals, the group will encourage a coalition of like-minded institutions to adopt the standards on their own and "coordinate their scheduling activities with those of similar inclination toward higher academic standards."

The recommendations of the Georgia seminar have been endorsed by the athletic directors in the Atlantic Coast Conference.

Later this week, the College Football Association's annual meeting will also take up the question of academic standards. The association will discuss a committee recommendation that is reportedly more stringent than the one proposed by the Georgia seminar.

Don Canham, director of athletics at the University of Michigan and one of those who attended the Georgia meeting, said that "the primary conclusion reached by the seminar was that most of the violations in the country today are brought about when eligibility for scholarships at

Continued on Page 12, Column 4

THE MINTER-BOWEN REPORT, PART IV

While Colleges Have Proved to Be Adaptable and Tenacious, They Are Also Vulnerable

By W. JOHN MINTER
and HOWARD R. BOWEN

Although our task is not to predict what may happen to higher education in the years ahead, it would be foolish to ignore the negative features of the outlook. They are three:

▶ The declining number of 18-year-olds.

▶ The generally depressed economic conditions.

▶ The actual or impending retrenchment in public appropriations.

Colleges and universities have already been through more than a decade of financial squeeze and are not in a good position to face triple threats.

We can report, on the basis of their past record, that colleges and universities are surprisingly resilient. Moreover, we can visualize different scenarios regarding the changing environment in which they will operate.

Therefore we do not assume that utter devastation is the only possible outcome. But we do believe that the leaders of our society would be well advised to exercise care in the treatment of higher education over the next several years. Our colleges and universities are vulnerable.

Revenues

The financial position of colleges and universities cannot be discovered or described in absolute terms. No one knows precisely how much money an institution, or a system of higher education, needs to achieve an "acceptable" standard of performance.

But, by observing trends over several years, it is possible to find out whether the financial position is improving, remaining constant, or deteriorating.

To begin, the figures in Table 1 show percentage increases in revenues from year to year, by types of institution from 1978-79 to 1980-81. For purposes of comparison, the percentage changes in the Consumer Price Index are also shown.

Those figures lead immediately to two conclusions:

▶ That the annual percentage increases were substantial.

▶ That the increases were greater for the private sector than for the public sector.

When inflation and enrollment growth are taken into account, it is likely that the real income of the public institutions declined somewhat.

Unfortunately, we lack data for 1980-81 for the public sector, but from what is known about the financial situation of the states, and from scattered data we have been able to obtain, it is almost certain that revenue growth in 1980-81 was less rapid in the public sector than in the private.

It is clear, however, that a valiant effort was made throughout the higher-education system, both private and public, to avoid financial deterioration. The increase in revenues was almost sufficient to overcome the double-digit inflation, and that was a kind of victory.

Sources of Revenues and Allocation of Expenditures

Colleges and universities tap many sources of revenue. They are well known for getting money wherever it can be found. Moreover, from time to time the country goes through great debates about the financing of higher education, and major new legislation is enacted.

Yet over the years, the percentages of revenue to higher education from various sources have remained surprisingly constant. The same stability exists in the budgeting of higher-education expenditures for various purposes.

The stability of sources of revenue and of objects of expenditure is undoubtedly a strength of higher education. It indicates that the sources of revenue were steadfast and that the budgetary allocations were defensible and reasonably secure.

In recent years, however, there have been barely perceptible trends in the percentages that bear watching.

The percentage of revenues from tuition and fees has been declining ever so slightly at both private and public institutions, and so has the percentage from local government, a source that is of particular importance to two-year colleges. At the same time, the percentages from miscellaneous (and perhaps unstable) sources have been slowly rising.

The changes are slight and no alarm should be sounded, but they are worth mentioning.

On the expenditure side, there were two notable changes that suggest financial stringency.

One was the decrease in the percentage of expenditures going to instruction. Of course, instruction is the heart of higher education. It includes the expenditures of academic departments for teaching and research, and it includes faculty salaries and other expenses related to the running of those departments. Any reduction in the percentage of expenditures for instruction must be viewed with some concern.

The other trend worth watching is the slow increase in the percentage going to institutional support. This refers primarily to the costs of general administrative operations, and those costs have expanded in recent years. The shift of funds from instruction to administration was imposed by circumstances and was not intentionally sought. However, it is a disturbing development.

Assets and Liabilities

Trends in assets and liabilities are more relevant to the private sector than to the public sector. Private institutions unequivocally own their assets and owe their liabilities. That may also be true of some public institutions, but for most the assets and liabilities belong ultimately to the state governments or to other sponsoring public bodies.

Table 2 shows the changes from year to

Continued on Following Page

1: Year-to-Year Growth of Institutions' Revenue

	Change from previous year		
	1978-79	1979-80	1980-81
Private institutions			
Research universities	+11.5%	+15.6%	+15.3%
Ph.D.-granting universities	+10.0%	+13.5%	+14.1%
Comprehensive institutions	+11.4%	+12.9%	+14.6%
Selective liberal-arts colleges	+ 8.8%	+13.4%	+13.3%
Less selective liberal-arts colleges	+ 6.0%	+10.8%	+13.7%
2-year colleges	+11.8%	+10.4%	+12.9%
All types combined	+10.3%	+13.0%	+14.7%
Public institutions			
Research universities	+ 9.9%	+12.9%	n.a.
Ph.D.-granting universities	+11.1%	+11.7%	n.a.
Comprehensive institutions	+10.4%	+10.5%	n.a.
2-year colleges	+ 9.0%	+11.8%	n.a.
All types combined	+10.3%	+11.9%	n.a.
Consumer Price Index	+ 9.3%	+12.8%	+12.1%

2: Assets and Liabilities of Private Institutions

	Change from previous year		
	1978-79	1979-80	1980-81
Private institutions			
Assets			
Current	+13.7%	+14.1%	+13.1%
Endowment	+ 6.9%	+ 9.0%	+ 9.5%
Plant	+ 6.1%	+ 8.4%	+ 8.4%
Other	+ 8.7%	+ 8.3%	+ 8.5%
Total	+ 6.6%	+ 8.9%	+ 9.0%
Interfund borrowing	+16.6%	+35.8%	+35.0%
Net assets	+ 6.6%	+ 8.2%	+ 8.3%
Liabilities			
Current	+16.3%	+ 1.4%	+ 0.3%
Plant	+10.6%	+15.2%	+15.5%
Other	+ 6.3%	+ 9.0%	+ 9.6%
Total	+10.5%	+10.7%	+10.5%

3: How Presidents Assess Institutions' Financial Condition

	Gaining ground	Holding their own	Losing ground	Trend consensus *
Private institutions				
Research and Ph.D.-granting universities	69%	25%	6%	+63%
Comprehensive institutions	53%	42%	6%	+47%
Selective liberal-arts colleges	65%	26%	9%	+56%
Less selective liberal-arts colleges	37%	40%	20%	+17%
2-year colleges	29%	43%	29%	0%
1980-81 total	42%	38%	18%	+24%
1979-80	50%	42%	8%	+42%
1977-78	50%	42%	7%	+43%
1976-77	49%	36%	15%	+34%
1975-76	41%	39%	20%	+21%
1974-75	30%	48%	22%	+ 8%
Public institutions				
Research and Ph.D.-granting universities	22%	33%	44%	−22%
Comprehensive institutions	21%	24%	54%	−33%
2-year colleges	19%	26%	56%	−37%
1980-81 total	19%	26%	54%	−35%
1979-80	16%	43%	41%	−25%

*. Those gaining ground minus those losing ground

4: Presidents' Expectations for Next 5 Years

	Will improve substantially	Will improve a little	No change	Will slip a bit	Will deteriorate seriously
Private institutions					
Research and Ph.D.-granting universities	31%	50%	19%	0%	0%
Comprehensive institutions	38%	51%	2%	9%	0%
Selective liberal-arts colleges	35%	56%	7%	2%	0%
Less selective liberal-arts colleges	27%	43%	7%	20%	0%
2-year colleges	0%	29%	0%	43%	0%
All types combined	23%	43%	5%	20%	0%
Public institutions					
Research and Ph.D.-granting universities	11%	67%	6%	11%	6%
Comprehensive institutions	22%	55%	6%	13%	3%
2-year colleges	22%	48%	6%	22%	2%
All types combined	21%	52%	6%	19%	2%

SOURCE: W. JOHN MINTER AND HOWARD R. BOWEN

Milton College Closes Campus; Adult Programs to Continue

MILTON, WIS.

Milton College, $4-million in debt and with only 210 students enrolled this spring, has closed its campus but is still in business.

Ronald J. Dickman, president of the college, said last week that Milton's off-campus program—with 1,500 part-time adult students enrolled at 20 locations—would continue and probably expand.

"We believe it's wiser to cease the on-campus residential program until demand returns," he said.

The $4-million debt consists mostly of mortgages on campus buildings, Mr. Dickman said, and it has been substantially paid off by giving the buildings to the mortgage holders.

Some 80 employees, including about 24 faculty members, were laid off when the on-campus program was closed last month by a vote of the college trustees.

The off-campus program, begun in 1976, has made money for the college, Mr. Dickman said.

The program offers courses toward degrees in business management, criminal justice, and nursing in five nine week sessions each year.

With the college's resources freed from the money-losing campus program, the president said, Milton will be able to expand the off-campus activity.

The college may return to a traditional residential program sometime in the future if there is renewed demand for it, he said.

Dying Institutions: Researchers Have Ignored an Unpleasant Topic

ANN ARBOR, MICH.

Although an increasing number of colleges are closing, there has been no systematic study of what is involved, researchers at the University of Michigan contend.

James L. Miller, Jr., professor of higher education, and J. Michael Erwin, project director at the university's Institute of Labor and Industrial Relations, said at a research conference here that the tendency to ignore the unpleasant subject of dying institutions had prevented others from learning more about it.

They reported they had been able to find relatively complete data on only 27 of some 200 college closings that have occurred in the past 20 years.

"Both the process and outcomes need further study," they said, "before objective, informed conclusions can be drawn about whether closings are good or bad, and under what set of circumstances they should be resisted, permitted, encouraged, or facilitated."

The number of college closings increased from 95 in the 1960's to 141 in the 1970's, they said, and in the 1980's there may be 200 or more.

"It is possible that those predictions will prove conservative," they said, "especially if federal assistance to students and to higher education in general is reduced."

The Michigan researchers said that although nearly all the institutions closing have been private, "we may see the emergence of state-level planning for retrenchment that will parallel the state-level planning for growth in higher education which occurred in the 1960's.

"Such planning could include the closing of some public colleges in some states."

"The specter of 'private-college closings' can be used creatively for fund-raising and public-relations purposes," they said, "by those for whom [closing] is not likely, at least in the immediate future.

"For institutions which are nearer to the reality, public pronouncements about the possibility are usually weighed more closely. For them, public statements about possible closing may become self-fulfilling prophecies."

Research on college closings should give top priority to the question of when to close, Mr. Miller and Mr. Erwin said.

"Answers are not offered in the literature on closings," they said. "What appears to be necessary is research aimed at identifying what might be called the 'tipping point' of institutional survival," beyond which last-ditch efforts are hopeless.

FACT-FILE

Faculty Salaries by Discipline Group

1981-82 averages at 70 state universities and land-grant colleges

	Professor	Associate professor	Assistant professor	New assistant professor	Instructor	All ranks
Agriculture and natural resources	$32,678	$25,949	$21,794	$21,096	$16,114	$27,742
Architecture and environmental design	33,091	26,912	21,742	20,952	18,374	27,140
Area studies	32,785	23,818	19,559	19,790	15,820	25,927
Biological sciences	34,326	26,094	21,416	19,635	15,226	28,732
Business and management	38,475	30,444	26,012	25,591	19,023	30,854
Communications	32,841	25,351	20,555	19,672	15,545	25,111
Computer and information sciences	[illegible]	29,697	25,386	25,395	19,139	29,851
Education	[illegible]	25,469	20,678	19,238	16,674	25,812
Engineering	37,382	29,017	25,243	25,204	17,953	31,949
Fine and applied arts	30,984	23,740	18,950	17,709	15,600	24,407
Foreign languages	33,728	24,338	19,380	17,286	16,005	25,344
Health professions	37,422	29,226	24,009	23,611	17,491	27,996
Health services, paramedical technology	32,983	22,936	18,323	——	14,324	18,131
Home economics	33,357	25,722	21,071	20,219	16,551	24,030
Interdisciplinary studies	35,322	25,713	19,532	17,954	14,892	25,877
Law	46,305	35,378	31,009	28,789	18,119	41,328
Letters	33,615	24,257	19,065	17,589	15,049	25,100
Library science	32,483	25,749	19,217	20,679	18,678	25,005
Mathematics	35,774	26,070	20,616	19,869	15,289	28,342
Physical sciences	36,209	26,421	21,419	20,131	17,096	30,925
Psychology	34,936	25,016	19,835	18,829	17,279	28,206
Public affairs and services	34,834	27,633	22,386	21,006	18,693	27,290
Social sciences	35,136	25,844	20,277	18,734	17,072	27,921
Technical and occupational curriculums	34,295	26,339	21,478	21,024	16,417	23,645
All disciplines	$35,232	$26,498	$21,841	$21,065	$16,757	$28,120

SOURCE: OFFICE OF INSTITUTIONAL RESEARCH, OKLAHOMA STATE UNIVERSITY

Colleges Have Proved to Be Adaptable, Tenacious—and Vulnerable

Continued from Preceding Page

year in the assets and liabilities of our sample of private institutions. The figures refer to percentage changes from the end of one fiscal year to the next, up to fiscal 1981.

Comparing changes in related assets and liabilities, current assets increased much more than current liabilities; plant assets increased less than plant liabilities; total assets increased slightly less than total liabilities; and interfund borrowing—the temporary transfer of funds within an institution—increased sharply.

The marked improvement in the current ratio of assets to liabilities is a good sign, and the increase in interfund borrowing is a sign of financial stringency. It is likely that a particular group of institutions was responsible for one of those changes and a different group for the other.

Altogether, the asset and liability data for the private sector indicate that only minor changes occurred. Except for the increase in interfund borrowing, the data do not signal much distress. That conclusion is confirmed by the stability over the years in the percentage distribution among various categories of assets and of liabilities. The percentages have remained remarkably steady, and the minor changes have on the whole been favorable.

Although the asset and liability data on public institutions are sparse, one indication of stringency is the substantial 29-per-cent increase in current liabilities during the year 1979-80.

Presidents' Assessments

As part of our survey, we asked the presidents of the sample institutions to assess recent trends in the financial condition of their institutions. We asked each of them to indicate whether his or her college or university was gaining ground, holding its own, or losing ground. As shown in Table 3, the responses varied greatly by types of institution.

Those in the best shape, according to the presidents, were the private universities and the selective, private, liberal-arts colleges. And the private sector as a whole was far better off than the public sector.

The table also shows the trend in responses over a period of years, indicating that the presidents' assessments were considerably less sanguine in 1980-81 than in the previous years. The recent trend is downward.

We also asked the presidents to give their views as of 1980-81 on the outlook for their institutions over the next five years. The responses regarding the future, shown in Table 4, were on the whole more favorable than those for the immediate present.

However, there were differences among types of institution. The presidents of private universities and selective liberal-arts colleges were relatively optimistic, and the presidents of the less selective liberal-arts colleges and the two-year colleges were relatively pessimistic.

Concluding Comments

The information we have gathered pertains to 1979-80 and 1980-81, and with less completeness to 1981-82.

We tried to find out what had actually been happening to higher education during those years. We did not attempt any forecast of what might lie ahead in 1982-83 and later years.

Since the early 1970's, perceptions of the condition of American higher education have been strongly influenced by gloomy forecasts of the future. Time after time, the forecasts have not come true, and reality has proved to be more favorable than expected.

The same may be said of the early 1980's, which have really been an extension of the 1970's. The worst fears, at least up to 1980-81, have not materialized.

Enrollment has held up, although the composition of the student population has changed; budgets have been balanced; little retrenchment in educational programs has occurred; the qualifications of the faculties have never been higher; faculty-student ratios have not changed very much; efficiency of operation has probably improved; and few institutions (no major ones) have expired.

Higher education has proved itself to be adaptable and tenacious. Most of the institutions that encountered reverses have been able to surmount their difficulties.

Of course there have been some negative factors.

Increasing proportions of the students have come to colleges poorly prepared academically, and many have been excessively oriented to careers and have not been as receptive to liberal learning as many educators (including the writers) would like. The proportion of part-time faculty members has increased, and working conditions for faculty members may have deteriorated somewhat.

But the changes are more in the nature of challenges to be overcome than of inevitable conditions to be endured.

One surprising element in the situation over the past year or two has been that public colleges and universities appear to have made less progress, or to have been harder hit, than private institutions. We surmise that this was due to the tax revolt and the economic depression, both of which have exerted a negative influence on tax receipts and therefore on state appropriations.

Those same influences have not affected the revenue sources of the private sector. Its turn may come, if and when federal and state student-aid appropriations are cut.

The financial problems over the past decade, and continuing up to the present, have been real, even though some have been concealed. They have been in the nature of a steady and relentless squeeze.

Although most formal budgets have been balanced, it is quite clear that not all costs have been funded. Most institutions have accumulated large backlogs of deferred maintenance and deferred replacement of buildings and other durable assets.

No one knows how big this backlog really is.

Perhaps more important, most institutions have failed to increase faculty and staff compensation in proportion to inflation, and most have fallen even further short of increasing compensation to match the earnings of people of comparable skills in other industries. The faculty members and other workers in academe have borne the brunt of the financial squeeze.

As indicated in Part I of this series, the decline in real compensation of faculty and staff members has been going on for more than a decade, and it has continued in the first few years of the 1980's.

The effects of that slow attrition have been masked partly because it has been gradual and partly because the responses of supply have tended to lag far behind changes in demand.

Faculty members who have made lifetime commitments to the academic profession do not leave it immediately upon the onset of unfavorable trends in compensation and other working conditions. Neither do people preparing for the academic profession immediately switch to other fields when conditions in academe become less favorable. Because of those lags in response, adverse trends of the past decade have not resulted in a wholesale flight from the profession. But if conditions continue to deteriorate, the number and caliber of the people preparing for the profession will probably decline, and the number already in the profession who will try to leave it will probably increase.

The current flight to industry of faculty members in engineering and business, and the difficulty of employing people in those fields, may be a harbinger of what lies ahead. It is sometimes forgotten that those are by no means the only fields in which faculty members may have outside options.

NOTE

This is the final article in a four-part series by W. John Minter and Howard R. Bowen on trends in American higher education.

Mr. Minter is a higher-education consultant in Boulder, Colo., and Mr. Bowen is professor of economics and education at the Claremont Graduate School.

This Minter-Bowen report continues, in a new format, a series of six studies published from 1975 to 1980.

Their previous reports were: *Private Higher Education*, published by the Association of American Colleges in 1975, 1976, and 1977; *Independent Higher Education*, published by the National Association of Independent Colleges and Universities in 1978 and by the National Institute of Independent Colleges and Universities in 1980; and *Preserving America's Investment in Human Capital*, published in 1980 by the American Association of Community and Junior Colleges, the American Association of State Colleges and Universities, and the National Association of State Universities and Land-Grant Colleges.

Women's Sports Unit Expected to Suspend Activity this Week

By PAUL DESRUISSEAUX

WASHINGTON

The executive board of the Association for Intercollegiate Athletics for Women is expected to act this week to suspend all of the organization's programs and services until its antitrust lawsuit against the National Collegiate Athletic Association is settled.

The A.I.A.W. was scheduled to poll by telephone the 26 members of its executive board on a proposal to dissolve the 10-year-old association in all but name until the suit is resolved.

The A.I.A.W., which guided the expansion of women's intercollegiate athletic programs, has asked the federal district court here to bar the N.C.A.A. from running its own women's sports championships, which it began sponsoring last fall. A trial is not expected before late summer.

Under the dissolution proposal, the A.I.A.W. would cease operations as of June 30. At that time the organization, under the management of its four-member executive committee, would exist only to continue its legal battle. If the lawsuit is successful, the 26-member executive board would be reconstituted and the A.I.A.W. would go back into business. Otherwise, it would remain dissolved. Most members of the A.I.A.W. staff would be laid off on June 30, although a skeleton "transition" team would stay on through August 30.

Ann Uhlir, executive director of the A.I.A.W., said last week that approval of the dissolution was not in question, since the executive board voted 21 to 3 in April to endorse the plan. "All debate and discussion of this proposal has already taken place," Ms. Uhlir said.

Special Meeting Canceled

Originally, the entire membership was to vote on the proposal at a special meeting here on June 7. That meeting was canceled when only 95 of the 759 member institutions—far short of the 253 required for a quorum—said they would send a voting delegate. Lacking a quorum, the executive board will act on the proposal.

At the organization's annual meeting in January, however, the membership took several actions that paved the way for dissolution of the A.I.A.W., which stopped processing membership renewals as of March 1.

The A.I.A.W. filed its antitrust suit last October, charging that the N.C.A.A. had unfairly used profits from men's intercollegiate athletic programs to offer a $3-million program of championships for women.

"We are alleging in the suit that the N.C.A.A.'s entry into women's athletic championships precludes anyone else's sponsoring such events, because it is subsidizing those programs with more than anyone can possibly earn from them," says Ms. Uhlir. "They have put $3-million into this, and the most that could be made is $500,000. They are not in fair competition."

Officials of the women's group say the N.C.A.A.'s sponsorship of women's championships has resulted in losses to the A.I.A.W. of members, championship participants, sites for events, and television revenue essential to the continued operation of the organization.

Fewer Teams Compete

More than 20 per cent of A.I.A.W.'s members did not renew this year, and there has been a 12-per-cent decrease in the number of teams competing in its championships. Most of those losses were among Division I institutions, which have the largest and most visible women's sports programs. Because of that, network and cable-television and commercial sponsors have withdrawn support for A.I.A.W. events.

The organization determined that it could not continue to operate on the dues paid by its remaining members, and that it had no way of matching the $3-million the N.C.A.A. pumped into its women's program.

The A.I.A.W. failed in an attempt in February to obtain a preliminary injunction barring the N.C.A.A. from offering women's championships while the suit was being contested.

An appeal of that decision was also denied.

The N.C.A.A. has argued that the A.I.A.W. is trying to protect its own past "monopoly" over women's intercollegiate athletics.

The A.I.A.W. submitted its "final statement of contentions and proof" to the court on May 7, and the N.C.A.A. was to submit its response last week.

The case will be heard by Judge Charles R. Richey of the U. S. District Court for the District of Columbia. Judge Richey earlier instructed the two organizations to pursue an out-of-court settlement.

However, "the potential for a successful settlement at this time is remote," says Ms. Uhlir, "and in all probability we will go to trial."

A date has not yet been set, but the case is not expected to go to trial much before August.

Top 20 College Football Coaches All Earn More than $100,000

MIAMI

The winningest coach in college football—Paul "Bear" Bryant of the University of Alabama—is also its best rewarded, earning a total of $450,000 in salary and benefits.

In a survey of income earned by college football's best-paid coaches, the Miami *Herald* reported that the top 20 in the greenback bowl all earned more than $100,000.

The figures represent base salary and benefits plus income from football-related radio and television activities. Income from other outside sources is not reflected in the "estimated total compensation" amounts.

In addition to the customary retirement and health-insurance plans, many of college football's top coaches receive assorted other benefits, including automobiles, country-club memberships, and additional insurance policies.

Alabama's Coach Bryant earns a base salary of $104,000, radio-and-television income of $300,000, and an estimated $46,000 in various benefits. The estimated total compensation for the Alabama coach does not include his income from commercial endorsements for a number of services and products sold regionally and nationally, from speaking engagements (for which he earns up to $15,000 per appearance), and other outside sources.

Following is the *Herald*'s list of the top 20 wage earners among college football coaches.

Paul (Bear) Bryant, U. of Alabama	$450,000
Barry Switzer, U. of Oklahoma	$270,000
Jackie Sherrill, Texas A&M U.	$240,000
Lou Holtz, U. of Arkansas	$226,000
Jerry Claiborne, U. of Kentucky	$152,500
Howard Schnellenberger, U. of Miami	$150,000
Chuck Fairbanks, U. of Colorado	$150,000
Bo Schembechler, U. of Michigan	$147,500
Tom Osborne, U. of Nebraska	$140,500
Bobby Bowden, Florida State U.	$140,000
Earle Bruce, Ohio State U.	$138,000
Johnny Majors, U. of Tennessee	$128,500
Charley Pell, U. of Florida	$123,000
Fred Akers, U. of Texas	$113,400
Don James, U. of Washington	$112,500
Lee Corso, Indiana U.	$108,500
Hayden Fry, U. of Iowa	$105,500
John Robinson, U. of Southern Cal.	$102,500
Joe Paterno, Pennsylvania State U.	$102,500
Vince Dooley, U. of Georgia	$100,000

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News Summary

Articles on inside pages

Congress has approved an extra $1.3-billion for Guaranteed Student Loans, to keep the program from running out of money this year, but the legislation may be vetoed on other grounds. Story on Page 19.

Budget writers in the House of Representatives renewed their search for a fiscal 1983 spending plan last week, after members rejected eight different proposals. Story on Page 19.

Giving to educational and charitable institutions rose 12.3 per cent last year, outpacing inflation. Story and table on Page 6.

The average salary for a full-time faculty member is 9.2 per cent higher this year than last, according to federal statistics. Story and Fact-File listing 1981-82 faculty salaries, by state, on Page 10.

Washington University will receive $25-million from the Monsanto Company over five years for cellular research. Story on Page 9.

The drive for compulsory continuing education for doctors, lawyers, and other professionals is reported to be slowing down. Story on Page 16.

Only about half as many men are studying to become Roman Catholic priests today as in 1972, says the new *Official Catholic Directory*. Story on Page 17.

A sharp line exists between "serious academic work and serious intellectual work," says Richard Sennett, director of the New York Institute for the Humanities. Story on Page 23.

The Polish government has ordered a review of the professional qualifications of university faculty members, a move some professors believe could lead to a political purge. Story on Page 21.

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Moves to Control Abuses in Sports Eyed by Major Universities

Two associations plan talks on how presidents can best deal with violations

By **MALCOLM G. SCULLY**

WASHINGTON

Worried by widespread reports of recruiting violations and other abuses in big-time college sports, more and more college presidents are seeking increased control over their athletic programs.

Next week the American Council on Education will bring together a small group of university executives for what Jack Peltason, the council's president, called an "informal, off-the-record discussion" of the seriousness of the problems facing big-time college sports, and of the steps presidents might take to control them.

And, in a move that Thomas A. Bartlett, its president, termed "a sign of the times," the Association of American Universities will name a committee this summer to investigate whether it should devote special attention to intercollegiate athletics. That would represent a departure for the A.A.U., which has traditionally concerned itself with research and graduate education.

'Allegations in the Newspapers'

John W. Ryan, president of Indiana University and this year's chairman of the A.A.U., said presidents were increasingly concerned about "allegations in the newspapers about violations and improprieties" in intercollegiate sports. The association's committee, he added, will "consider whether those problems warrant special attention by the A.A.U. itself."

The presidents of major football and basketball powers have often been criticized for exerting too little influence on their athletic programs.

Concern about such criticism was reflected in an internal report prepared by Robert H. Atwell, vice-president of the American Council on Education.

"There is a strong body of opinion which holds that the problems of corruption in big-time football and basketball are of crisis proportions and threaten to discredit our institutions," he wrote.

"The recent revelations about transcript manipulation and the allegations by coaches and former coaches about illegal payments to athletes have raised serious concerns about whether big-time football and basketball programs are really under the control of the chief executives and governing boards."

A copy of the report was obtained by *The Chronicle* from an outside source.

Mr. Ryan of Indiana and William C. Fri-

Continued on Page 14, Column 1

How one institution tries to insure that its athletes make academic progress

By **LORENZO MIDDLETON**

ALBUQUERQUE, N.M.

The students were clearly athletes. About 50 of them—mostly football players with chests and arms bulging under their T-shirts—were gathered here in one of the University of New Mexico's arenalike lecture halls.

Some plainly would rather have been somewhere else. They slouched and shifted in their little wooden chairs, their legs too bulky or too long to fit comfortably under the desks.

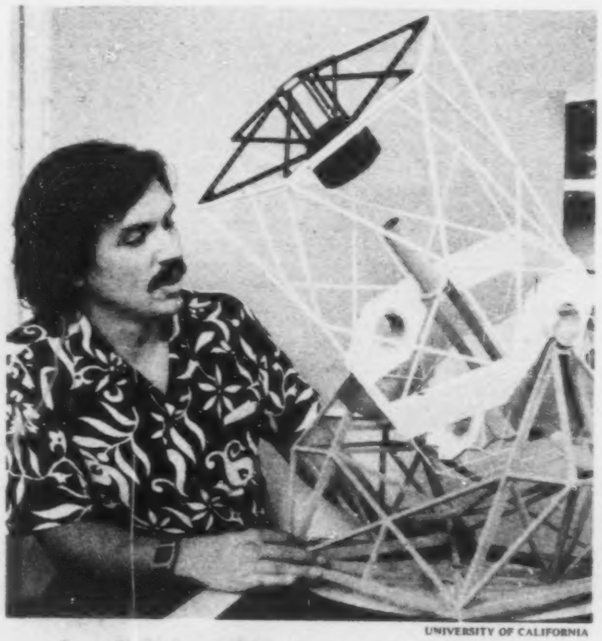
Most were immersed in their books, however, studying for finals or writing term papers. They were attending what is known here as the "study table," held, for varsity athletes only, four times a week for two hours a night, semester after semester.

It is probably better staffed and more closely monitored than any other study session on campus. Serving the 50 or so athletes are about a dozen tutors (graduate students who are paid by the athletic department), a full-time academic counselor, and a part-time counselor and "tutor coordinator." In addition, an athletic coach is always there to maintain discipline.

Whether they like it or not, many of the athletes at the University of New Mexico find themselves seated at the study table for at least one semester during their college careers. There are few truants—the penalty for an unexcused absence is a 6 a.m. makeup session.

The rules are set by the coaches and vary from team to team. All new football players, for example, must attend the study table during their first semester at the university, no matter what their grades were in high school or junior college. Oth-

Continued on Page 14, Column 1



UNIVERSITY OF CALIFORNIA

Jerry E. Nelson of the Lawrence Berkeley Laboratory examines a model of the giant telescope he hopes to build.

Berkeley Astronomer's Achievable Dream: a 10-Meter Telescope

By **KIM McDONALD**

BERKELEY, CAL.

Not far from the spot where University of California scientists constructed the first atom smasher more than 50 years ago, Jerry E. Nelson dreams of building another revolutionary scientific instrument—one capable of seeing several billions of years into the universe's past and of pushing the university to the forefront of modern astronomy.

He envisions a 10-meter telescope, the most powerful ground-based optical telescope in the world. While it is still something of a dream, it is now considered an achievable goal, one being pursued by several dozen scientists and engineers at four California campuses—as well as at the university's Lawrence Berkeley Laboratory and Lick Observatory.

The university has spent $1.1-million on designing and developing the telescope, which Mr. Nelson, a professor at the Berkeley campus and a researcher at the Lawrence laboratory, has nurtured from the start.

The university recently negotiated with the University of Hawaii

Continued on Page 8, Column 1

1981 Giving to Education and Charities Exceeded Rate of Inflation

NEW YORK

Giving to educational and charitable organizations totaled $53.62-billion in 1981, an increase of 12.3 per cent in a year, according to estimates by the American Association of Fund-Raising Counsel.

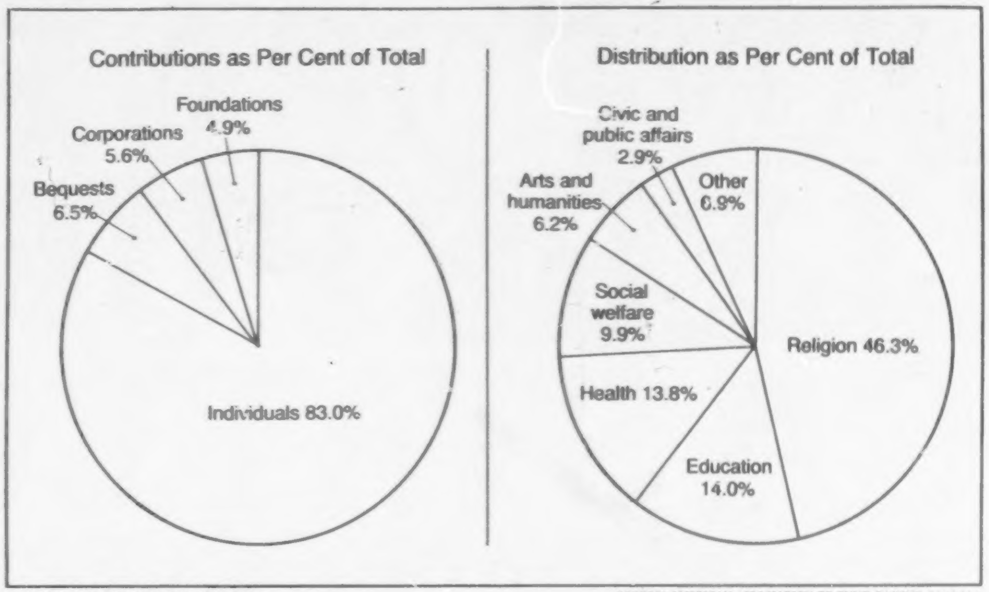
The increase was the largest ever recorded and, for the first time in three years, exceeded the rate of inflation.

Of the total, an estimated $7.49-billion went to education, including church-related and other private elementary and secondary schools as well as colleges and universities. Also included in the total for education is money given for research that is educational in nature and conducted at an educational institution.

For colleges and universities alone, the Council for Financial Aid to Education estimated earlier that giving in 1981 amounted to $4.21-million, an increase of 11.3 per cent over the previous year (*The Chronicle*, May 26).

The American Association of Fund-Raising Counsel estimated that total giving for education at all levels in 1981 was up 12.1 per cent, about the same as giving for all purposes, and, as in the previous year, represented 14 per cent of total giving.

Copies of the A.A.F.R.C.'s 1982 annual report, *Giving U.S.A.*, are available for $25 each ($16 to annual subscribers) from the American Association of Fund-Raising Counsel, 25 West 43rd Street, Suite 1519, New York 10036.



CHRONICLE CHART BY PETER H. STAFFORD

SOURCE: AMERICAN ASSOCIATION OF FUND-RAISING COUNSEL

Largest Gifts to Universities and Colleges in 1981

Following is a list of the largest gifts to colleges and universities in 1981 as tabulated by the American Association of Fund-Raising Counsel:

Recipient	Donor	Amount
Louisiana State U.	Pennington Medical Foundation	$100,000,000
U. of California at Los Angeles	Hearst Corporation	62,000,000
U. of Oklahoma	Mr. and Mrs. Bill Saxon	30,000,000
Arkansas College	Jean Brown	14,300,000
Austin Presbyterian Seminary	Jean Brown	11,700,000
Michigan State U.	W. K. Kellogg Foundation	10,000,000
Boise State U.	Harry W. Morrison Family Foundation	6,500,000
Washington U. (Mo.)	Elinor Anheuser Storz	6,200,000
Swarthmore College	Eugene M. Lang	6,000,000
Harvard U.	Joseph E. Seagram & Sons	5,800,000
Texas A&I U.	Caesar Kleberg Foundation	5,300,000
Illinois Institute of Technology	Pritzker Foundation	5,000,000
Indiana U.	Lilly Endowment	5,000,000
Kent State U.	Jerry Silverman, Inc.	5,000,000
U. of Missouri at Columbia	Alberta Briegel Ponder	5,000,000
Northwestern U.	Arthur Rubloff	5,000,000
William M. Scholl College of Podiatric Medicine	Dr. Scholl Foundation	5,000,000
U. of Texas System	Houston Endowment	5,000,000
U. of Southern California	George Lucas	4,660,000
Babson College	Olin Foundation	4,300,000
U. of Michigan	W. K. Kellogg Foundation	4,000,000
Washington U. (Mo.)	Edward Mallinckrodt, Jr.	3,880,000
Duke U.	Duke Endowment	3,180,000
Columbia U.	Ludwig Schaefer	3,400,000
Johns Hopkins U.	William Penn Foundation	3,300,000
Cornell U.	J. N. Pew Jr. Charitable Trust	3,000,000
Harvard U.	William and Lucille Nickerson	3,000,000
U. of Puget Sound	An anonymous donor	3,000,000
Whitman College	Vernita Watts Adams	3,000,000
DePauw U.	Philip S. Charles	2,700,000
U. of California at Berkeley	Alfred P. Sloan Foundation	2,500,000
U. of Illinois	Harry H. Ferguson	2,500,000
Northwestern U.	Mrs. Wayne V. Jones	2,500,000
Massachusetts Institute of Technology	Alfred P. Sloan Foundation	2,500,000
Whitman College	Mina S. Schwabacher	2,500,000
St. Mary's U. of San Antonio	Albert B. Alkek	2,400,000
College of St. Teresa	Sisters of St. Francis	2,300,000
Babson College	Anonymous	2,000,000
Case Western Reserve U.	Andrews Foundation	2,000,000
Drake U.	Gardner and Florence Call Cowles	2,000,000
U. of Florida	Gas Research Institute	2,000,000
U. of Michigan	A. Alfred Taubman	2,000,000
U. of Minnesota	Marshall W. Alworth	2,000,000
U. of North Carolina at Greensboro	Benjamin Cone	2,000,000
U. of North Dakota	W. Kenneth Hyslop	2,000,000
Princeton U.	Thomas Nichol, Jr.	2,000,000
Oregon State U.	W. K. Kellogg Foundation	1,900,000
Princeton U.	Carl Egner	1,900,000
Le Moyne College	Dr. Hugh P. Reilley	1,650,000
Rochester Institute of Technology	Mary Flagler Cary Charitable Trust	1,600,000
Duke U.	Nello L. Teer, Jr., and R. Dillard Teer	1,500,000
Emory U.	Michael C. Carlos	1,500,000
U. of Houston	Cullen Foundation	1,500,000
U. of Iowa	Henry and Alberta Ponder	1,500,000
Pacific Lutheran U.	M. J. Murdock Charitable Trust	1,500,000
U. of South Carolina	Arthur Brown, Jr.	1,500,000
U. of Wisconsin at Madison	W. K. Kellogg Foundation	1,500,000
Wabash College	Ruth Lilly	1,300,000
Philadelphia College of Art	Mabel Pew Myrin Trust	1,250,000
U. of Chicago	Chase Manhattan Bank	1,250,000
Michigan State U.	Homer E. Nowlin	1,200,000
Brandeis U.	Harold L. Fierman	1,000,000
Davidson College	E. H. Little	1,000,000
Eastern Illinois U.	Newton E. Tarble	1,000,000
Southern Methodist U.	Roy M. & Phyllis Gough Huffington	1,000,000
Texas A&M U.	David Bullock Harris	1,000,000
Washington and Lee U.	Egbert B. Doggett	1,000,000
Whitman College	Grace Farnsworth	1,000,000

FACT-FILE

53 Largest U.S. Foundations, by Total of Grants Awarded Last Year

	1980 grants	1981 grants	1981 assets†
1. Ford Foundation	$103,222,000	$ 89,085,000	$ 2,565,572,000
2. Andrew W. Mellon Foundation	58,191,000	58,423,000	817,000,000
3. Pew Memorial Trust	45,478,000	51,272,000	1,100,000,000
4. W. K. Kellogg Foundation	47,671,000	49,813,000	746,020,000
5. Rockefeller Foundation	42,469,000*	42,558,000	866,200,000
6. Kresge Foundation	29,768,000	38,360,000	567,833,000
7. Robert Wood Johnson Foundation	39,778,000	35,858,000	1,094,207,000
8. Duke Endowment	33,420,000	35,818,000	406,513,000
9. Lilly Endowment	25,330,000	30,240,000	763,615,000
10. Charles Stewart Mott Foundation	30,539,000	27,693,000	386,204,000
11. Rockefeller Brothers Fund	22,895,000	26,608,000	148,085,000*
12. McKnight Foundation	9,153,000	25,737,000*	337,203,000*
13. Houston Endowment	15,380,000	18,817,000	260,000,000*
14. Alfred P. Sloan Foundation	16,734,000	15,542,000	253,385,000
15. James Irvine Foundation	11,479,000	14,122,000	272,361,000
16. Moody Foundation	11,238,000	13,500,000*	220,000,000*
17. Henry J. Kaiser Family Foundation	12,270,000	12,476,000	221,352,000
18. Bush Foundation	13,525,000	12,257,000	232,525,000
19. Edna McConnell Clark Foundation	11,488,000	11,929,000	200,337,000
20. Robert A. Welch Foundation	8,989,000	11,718,000	149,462,000
21. Carnegie Corporation of New York	10,884,000	11,686,000	335,717,000
22. John A. Hartford Foundation	7,710,000	10,257,000	125,470,000
23. Charles A. Dana Foundation	8,296,000	10,128,000	96,200,000
24. Vincent Astor Foundation	10,151,000*	12,193,000	42,646,000
25. Surdna Foundation	9,277,000	9,466,000	209,690,000
26. William Penn Foundation	7,977,000	8,990,000	129,189,000
27. Richard King Mellon Foundation	14,173,000*	8,795,000*	354,773,000*
28. Gannett Foundation	6,784,000	8,752,000	229,000,000
29. Sid W. Richardson Foundation	6,234,000	7,736,000*	105,000,000*
30. Commonwealth Fund	9,013,000	7,292,000	140,162,000
31. Northwest Area Foundation	6,665,000	7,276,000	131,506,000
32. Hearst Foundations	7,554,000*	7,200,000*	175,000,000*
33. Z. Smith Reynolds Foundation ‡	6,246,000	6,483,000	89,435,000*
34. Charles Hayden Foundation	4,280,000	6,312,000	75,154,000
35. Sarah Scaife Foundation	5,744,000	6,274,000*	111,371,000*
36. Amon G. Carter Foundation	10,085,000	6,254,000	98,703,000
37. William R. Kenan, Jr., Charitable Trust	4,281,000	6,167,000	116,468,000
38. Callaway Foundation	4,853,000	5,870,000	80,779,000
39. Howard Heinz Endowment	5,640,000	5,640,000**	86,366,000**
40. Claude Worthing Benedum Foundation	3,494,000	5,559,000	84,742,000
41. Henry Luce Foundation	2,624,000	5,556,000	118,551,000
42. George Gund Foundation	5,035,000	5,518,000	85,000,000
43. Charles F. Kettering Foundation	5,994,000	5,188,000	76,882,000
44. John Simon Guggenheim Memorial Foundation	4,927,000	5,123,000	88,371,000
45. Smith Richardson Foundation	3,680,000	4,994,000	96,282,000
46. El Pomar Foundation	3,890,000	3,587,000	81,500,000
47. John and Mary Markle Foundation	1,852,000	3,585,000	53,959,000
48. Mary Flagler Cary Charitable Trust	2,585,000	3,261,000	69,199,000
49. William T. Grant Foundation	2,084,000	3,248,000	73,423,000
50. Danforth Foundation	3,340,000*	3,131,000	97,471,000
51. Research Corporation	2,575,000	2,481,000	46,298,000
52. Tinker Foundation	1,667,000	1,575,000	30,477,000
53. Elliott White Springs Foundation	1,376,000	1,490,000	16,372,000
Total for 53 foundations	$779,387,000	$828,893,000	$15,366,030,000

* Estimate
** 1980 figure
† Market value at end of year
‡ Includes assets and excise taxes of two trusts

SOURCE: AMERICAN ASSOCIATION OF FUND-RAISING COUNSEL

FACT–FILE

Pay for Full-Time Faculty Members Averages $24,843, Up 9.2 Pct.

WASHINGTON

The average salary this year for full-time faculty members on nine-month contracts is $24,843, an increase of 9.2 per cent from last year, according to the National Center for Education Statistics.

The inflation rate was 8.9 per cent in the 12 months ending last December, the center said.

Previous yearly increases in average faculty salaries reported by the center were 6 per cent in 1978-79, 7.8 per cent in 1979-80, and 9.1 per cent in 1981-82.

For male faculty members, the 1981-82 average salary is $26,172, compared with $21,337 for female faculty members, the center said.

In addition to salary, faculty members are receiving an average of $4,956 each in fringe benefits this year. Public institutions reported fringe benefits averaging $5,030, compared with $4,772 for private institutionss.

The total number of full-time faculty members has increased in the past year by 1.2 per cent, which compares with an estimated increase of 1.9 per cent in enrollment last fall, the center said.

The N.C.E.S. salary data were based on information from 2,350 of the country's 3,253 colleges and universities.

The average 1981-82 salary of $24,843 reported by the center was almost identical to the overall average of $24,834 estimated by the Chronicle Survey on the basis of a sampling of individual faculty members by John Minter Associates of Boulder, Colo. (*The Chronicle*, November 11).

The Chronicle Survey estimated that the overall one-year increase in average salaries was 8.9 per cent.

Average 9-Month Faculty Salaries and Increases

Salaries for 1981-82

	All ranks	Professors	Associate professors	Assistant professors	Instructors	Lecturers	No academic rank
All institutions							
Men	$26,172	$32,907	$25,063	$20,805	$16,885	$18,338	$24,645
Women	21,337	29,612	23,719	19,546	15,973	16,077	22,142
Men and women	24,843	32,547	24,774	20,350	16,393	17,274	23,724
Public institutions							
Men	26,434	32,881	25,497	21,360	17,435	18,268	25,087
Women	22,016	30,476	24,462	20,195	16,549	15,888	22,647
Men and women	25,205	32,617	25,279	20,943	16,948	17,148	24,193
Private institutions							
Men	25,536	32,960	24,112	19,749	15,831	18,543	17,881
Women	19,591	27,830	22,220	18,370	14,733	16,630	15,039
Men and women	23,951	32,402	23,687	19,240	15,260	17,642	16,782

Increases since 1980-81

	All ranks	Professors	Associate professors	Assistant professors	Instructors	Lecturers	No academic rank
All institutions							
Men	9.3%	8.8%	8.8%	9.4%	8.9%	7.6%	8.6%
Women	8.8%	8.7%	8.7%	8.3%	8.0%	9.0%	8.6%
Men and women	9.2%	8.8%	8.7%	8.9%	8.4%	8.2%	8.7%
Public institutions							
Men	9.1%	8.3%	8.4%	9.3%	9.0%	7.1%	8.8%
Women	8.6%	8.0%	8.1%	8.0%	8.3%	7.9%	8.5%
Men and women	8.9%	8.2%	8.3%	8.9%	8.6%	7.4%	8.6%
Private institutions							
Men	10.0%	9.9%	9.7%	9.6%	9.0%	9.5%	9.5%
Women	9.5%	9.8%	10.3%	9.1%	7.1%	12.4%	8.3%
Men and women	9.8%	9.9%	9.7%	9.3%	8.1%	10.6%	9.1%

Average 9-Month Salaries, Compared by State

Public Institutions

	Professors	Associate professors	Assistant professors	Instructors	Lecturers	No academic rank
Alabama	$30,018	$23,937	$21,861	$16,023	$17,897	$19,520
Alaska	—	—	—	—	—	—
Arizona	38,243	28,824	23,048	17,912	19,330	26,647
Arkansas	29,328	22,946	19,639	15,197	11,581	16,558
California	35,236	27,569	22,581	21,833	—	31,343
Colorado	31,143	24,405	20,433	17,391	19,386	19,888
Connecticut	30,213	24,438	21,151	17,333	15,102	18,146
Delaware	38,454	26,606	20,970	18,351	15,604	22,615
District of Columbia	34,163	27,270	22,474	19,404	—	—
Florida	32,887	24,348	20,240	16,456	16,144	19,237
Georgia	33,038	25,457	20,783	16,662	17,470	—
Hawaii	35,023	25,771	20,932	17,283	—	23,490
Idaho	27,851	22,606	18,990	17,410	13,651	20,304
Illinois	33,099	25,737	21,647	17,720	17,447	23,505
Indiana	31,332	25,031	20,008	14,599	16,551	15,022
Iowa	33,287	25,396	20,586	16,041	20,268	19,478
Kansas	31,034	23,637	19,814	15,845	16,370	19,629
Kentucky	30,188	23,563	19,683	16,302	14,638	17,621
Louisiana	31,702	25,283	21,191	16,919	15,911	18,809
Maine	28,667	22,832	18,069	14,079	15,874	17,401
Maryland	30,649	25,911	21,089	16,835	15,397	—
Massachusetts	29,451	24,837	21,286	17,031	—	22,530
Michigan	31,993	25,257	21,297	17,626	17,052	26,598
Minnesota	33,309	23,507	19,338	17,191	23,964	23,936
Mississippi	30,117	24,312	19,769	15,501	—	17,907
Missouri	27,742	23,684	19,040	15,476	15,706	20,264
Montana	29,141	23,808	20,506	17,422	19,135	20,651
Nebraska	30,293	24,392	19,961	16,584	13,542	18,054
Nevada	35,183	27,501	22,643	20,122	24,156	21,649
New Hampshire	28,036	23,224	19,228	15,278	15,087	17,000
New Jersey	33,018	26,723	21,623	16,874	15,217	20,770
New Mexico	33,253	25,496	20,762	17,097	18,738	22,880
New York	28,437	23,990	18,922	15,588	—	—
North Carolina	33,548	26,138	21,971	17,266	17,663	16,119
North Dakota	32,120	24,387	21,441	18,650	14,027	21,973
Ohio	32,353	25,403	20,661	17,054	19,862	23,400
Oklahoma	31,302	25,875	22,304	17,921	14,813	21,506
Oregon	30,479	23,703	20,046	16,594	—	22,290
Pennsylvania	—	—	—	—	—	—
Rhode Island	31,396	24,552	21,097	13,971	—	—
South Carolina	34,960	25,927	20,758	16,203	16,416	16,262
South Dakota	26,331	21,767	18,523	15,819	14,381	15,827
Tennessee	28,124	21,377	17,987	15,419	—	—
Texas	33,877	26,463	21,987	17,850	17,532	22,066
Utah	32,686	24,484	20,410	16,441	16,727	20,623
Vermont	—	—	—	—	—	—
Virginia	—	—	—	—	—	—
Washington	32,805	25,333	21,167	17,354	20,419	24,300
West Virginia	28,237	23,358	19,641	15,874	11,538	—
Wisconsin	32,958	24,902	21,268	18,699	17,851	23,726
Wyoming	37,769	26,618	22,927	19,610	16,742	23,603
U.S. average	$32,617	$25,279	$20,943	$16,948	$17,148	$24,193

Private Institutions

	Professors	Associate professors	Assistant professors	Instructors	Lecturers	No academic rank
Alabama	$23,585	$17,410	$16,548	$14,068	$10,227	$15,227
Alaska	—	22,500	21,203	18,723	—	—
Arizona	25,561	22,480	18,745	13,752	—	—
Arkansas	23,361	19,896	17,497	14,964	—	12,800
California	36,700	26,045	21,141	17,373	17,231	21,331
Colorado	31,008	22,770	17,819	15,193	14,650	14,749
Connecticut	37,524	25,210	20,540	16,914	18,033	17,445
Delaware	21,216	19,803	16,647	13,440	—	—
District of Columbia	36,276	26,982	21,487	17,944	21,038	—
Florida	30,001	22,776	18,336	12,917	14,656	17,306
Georgia	28,967	21,051	17,016	13,301	—	14,229
Hawaii	22,964	19,149	16,473	12,901	13,910	—
Idaho	21,575	18,568	17,130	13,774	—	—
Illinois	35,332	24,786	20,278	16,827	18,907	19,895
Indiana	28,780	22,796	18,702	15,080	15,800	17,510
Iowa	25,830	20,711	17,871	15,662	20,900	14,620
Kansas	20,188	17,611	15,169	13,444	12,415	14,172
Kentucky	23,354	19,175	15,950	13,360	11,886	13,936
Louisiana	28,977	23,327	18,331	14,220	—	—
Maine	34,214	24,817	19,114	16,943	18,646	15,980
Maryland	36,161	23,524	18,848	15,016	13,899	17,577
Massachusetts	36,122	25,865	20,959	16,628	19,698	15,017
Michigan	27,721	22,637	18,589	15,511	14,789	20,822
Minnesota	29,192	23,149	19,238	15,830	16,287	17,398
Mississippi	21,625	17,744	14,583	12,740	—	10,325
Missouri	29,870	21,886	18,025	14,548	14,434	16,949
Montana	23,955	19,174	16,911	16,195	—	17,490
Nebraska	25,444	21,407	17,623	14,987	13,201	15,580
Nevada	—	—	—	—	—	—
New Hampshire	33,234	22,876	19,544	14,702	11,200	12,764
New Jersey	35,824	25,291	20,082	15,482	18,902	15,750
New Mexico	22,370	16,587	12,919	12,012	—	17,582
New York	35,357	25,703	20,256	15,743	18,923	19,760
North Carolina	24,294	20,219	16,686	13,833	19,935	14,482
North Dakota	26,000	21,258	19,924	12,908	—	11,964
Ohio	28,876	22,478	18,539	15,637	15,506	13,175
Oklahoma	28,417	23,290	18,696	15,131	13,667	15,928
Oregon	29,108	22,263	18,522	14,724	18,339	12,134
Pennsylvania	23,651	19,804	17,558	14,748	10,000	—
Rhode Island	35,968	25,593	19,471	17,260	20,392	23,863
South Carolina	23,418	18,994	15,845	12,965	—	14,235
South Dakota	22,912	19,505	16,690	13,578	—	14,343
Tennessee	28,773	21,950	17,541	14,523	14,527	15,544
Texas	30,066	23,068	19,291	14,951	17,000	15,895
Utah	20,892	15,070	17,705	11,448	—	—
Vermont	19,273	17,713	15,400	14,733	—	—
Virginia	24,071	19,213	17,485	13,939	10,500	11,500
Washington	28,412	23,024	18,983	16,553	13,457	—
West Virginia	21,518	19,291	16,250	14,557	—	—
Wisconsin	28,764	22,858	19,059	14,977	10,318	12,300
Wyoming	—	—	—	—	—	—
U.S. average	$32,403	$23,687	$19,240	$15,260	$17,642	$16,782

— No data

SOURCE: NATIONAL CENTER FOR EDUCATION STATISTICS

Academic Progress for New Mexico Athletes

Continued from Page 1

ers on the team must attend if their grade-point averages at New Mexico fall below 2.0 (out of a possible 4.0). Basketball players are required to attend if their averages fall below 2.5.

About half of the members of the basketball team and three-quarters of the football squad end up at the study table in a given year, says Thomas M. Brennan, the university's chief academic adviser for athletes.

A mixture of players from the baseball, soccer, tennis, and other men's varsity teams make up the balance of those who attend, Mr. Brennan says. Rarely do female athletes show up at the table, he adds, because their grades tend to be higher than those of males.

The University of New Mexico has only recently become serious about such things as study tables, tutors, and academic advisers for athletes.

Courses with No Work

Students, administrators, and faculty members here acknowledge that, until three years ago, varsity athletes were seldom encouraged to do more than the minimum academic work required to keep them eligible for sports.

Some coaches went so far as to arrange for players to enroll in courses in which they were required to do no work at all.

As a result, says Walt Arnold, a former New Mexico football and baseball player, "we didn't have too many players flunking out. If a guy was in trouble academically, you just took the easiest course you could find to bring your grades up. Nobody cared whether or not it would lead to a degree."

Mr. Arnold, now a tight end for the Los Angeles Rams, says he was more than three semesters short of graduation when, in 1979, he left the university after four years here. He now attends classes part time, in the off season, but does not expect to earn his degree (in physical education) until 1984.

Changes in NCAA Rules

Humorous stories about "dumb jocks" taking easy courses have been a part of the folklore of college sports for years. But the joke became a serious embarrassment for New Mexico and several other big-time-sports institutions in the fall of 1979, when documented stories began to spread about forged transcripts, unearned credits, and other academic irregularities involving college athletes and their coaches.

Those disclosures led to widespread calls for reform. The National Collegiate Athletic Association responded by tightening its rules for academic eligibility.

At its annual convention in January, 1981, the association voted to require athletes competing in N.C.A.A.-sponsored events to complete 12 credit hours a term. Until then, the N.C.A.A. required only that athletes make "satisfactory progress" toward a degree, leaving it up to sports conferences and individual colleges to define "satisfactory."

At the 1981 meeting, the N.C.A.A. members voted to require colleges to publish their standards for measuring students' academic progress and to prohibit athletes from enrolling in extension and credit-by-examination courses offered by other institutions.

Even before the N.C.A.A. overhauled its rules, many colleges had begun revising and tightening their academic policies for athletes.

Some major institutions—Arizona State University and the University of Southern California, for example—conducted internal investigations and adopted wide-ranging reforms after their problems were exposed in newspapers around the country. Other institutions whose names appear less frequently on the sports pages, such as Duquesne University, were prompted by the scandals at other colleges to raise their academic standards for athletes.

> **"I'm not arguing that we should change the system we have, but I do think there has been some overreaction. I think there is a happy medium somewhere that ought to be reached."**

The athletic department at New Mexico, the scene of one of the most notorious scandals, has since put into effect some of the most sweeping academic reforms in the N.C.A.A.

Still called "Lobogate" by the local news media (after New Mexico's mascot), the scandal resulted from a Federal Bureau of Investigation probe of gambling in the Albuquerque area. The investigators overheard a phone conversation in which an assistant basketball coach at New Mexico told Norm Ellenberger, the head coach, that he had arranged for a forgery of the junior-college transcript of a basketball player they had recruited.

The coaches were brought to trial in federal court for mail fraud and bribery, but the judge dismissed the charges, saying that such abuses were common in big-time college athletics and were best handled by the N.C.A.A.

Further investigations by the N.C.A.A. and a faculty committee at the university turned up numerous additional infractions. Six basketball players and one football player were found to have received credit for extension courses offered at a community college in California without having attended classes or done any work.

University 'Devastated'

The players, who claimed to have been unaware that they had been signed up for the bogus courses, were declared ineligible for the remainder of the 1979 season. The N.C.A.A. put the university on probation for three years and barred it from postseason competition in basketball for two years. The Western Athletic Conference ordered New Mexico to forfeit several of its 1979 basketball games.

"The whole episode just devastated this place," says Sidney Rosenblum, a professor of psychology who now chairs the faculty athletic council. "It did a great deal of damage to the integrity and the morale of this university."

The scandal reflected a general lack of concern on the campus about the academic accomplishments of athletes, Mr. Rosenblum says. To illustrate, he points with em-

Moves to Control Sports Abuses Eyed

Continued from Page 1

day, president of the University of North Carolina, have been active in both the A.C.E.'s and the A.A.U.'s plans to get the chief executives more involved.

Mr. Friday, who first raised the question of what the presidents should be doing at a meeting of the A.A.U. in April, said last week, "My interest is in getting the issue looked at seriously by the men in these particular institutions.

"I've been involved with enough of these things to know that it takes a lot of hard work and careful work to be fair and to be thorough in dealing with this subject."

All of the organizers of the American Council's meeting stressed the need for participation by presidents of institutions directly involved in big-time sports.

"The ones we need to get involved are the people who face the realities of the problem," Mr. Peltason said. "It's relatively easy to talk about changes if you don't have the day-to-day responsibility for bringing those changes into being."

Mr. Peltason and Mr. Ryan said last week that the list of university presidents who will attend the meeting had not been completed. However, Mr. Friday indicated it would include presidents of institutions in the Atlantic Coast Conference, the Big 10 Conference, and the Southwest Conference.

Sheldon Hackney, president of the University of Pennsylvania and chairman of an interassociation committee on intercollegiate athletics, is also scheduled to attend.

The efforts by the A.C.E. and the A.A.U. come after a group of presidents and coaches, meeting in Brunswick, Ga., agreed to push for tougher admissions standards for students who receive athletic scholarships (*The Chronicle*, June 2).

Scholarship athletes would be required take three years of high-school English and two years of mathematics with at least a C average, and would have to have a combined score of 700 on the Scholastic Aptitude Test or 15 on the American College Testing Program's examination.

The Brunswick meeting was organized by Fred C. Davison, president of the University of Georgia and of the College Football Association, an organization of 61 big-time-football powers.

The group's recommendations are to be presented at next January's meeting of the National Collegiate Athletic Association.

At least initially, the efforts of the A.C.E. and the A.A.U. will not include representatives of such groups as the N.C.A.A. or athletic directors.

The organizers of the A.C.E.-sponsored meeting said they believed the presidents themselves must assert their responsibility for managing the sports programs.

UNIVERSITY OF NORTH CAROLINA

William C. Friday

Court Tells NCAA to Release Papers Sought in Libel Suit

TOPEKA, KAN.

The Kansas Supreme Court has ordered the National Collegiate Athletic Association to turn over 15 documents from its recruitment-investigations file to the Birmingham, Ala., *Post-Herald* so that the newspaper can defend itself in a libel suit.

The *Post-Herald* is being sued for $6.9-million by Edward Seal, principal of Butler High School in Huntsville, Ala. The newspaper reported last summer that Mr. Seal had paid Bobby Lee Hurt, a star basketball player, to play on Butler's team after he threatened to transfer to another school. The payments, according to the *Post-Herald*, were made from gate, receipts and revenues from soft-drink machines.

The Kansas Supreme Court's 5-to-2 decision modified a lower court's ruling that the newspaper be given the entire N.C.A.A. file.

The N.C.A.A. argued that the file contained, in addition to information concerning Mr. Hurt, confidential documents of no relevance to the newspaper's case.

The *Post-Herald* also reported that Mr. Hurt, now a student at the University of Alabama, had been pressured into attending Alabama by an alumnus to whom he owed money for a car. Mr. Hurt, it reported, had committed himself to another university, but signed with Alabama at the last minute. Mr. Hurt has filed his own libel suit against the newspaper for $800,000 in damages.

Universities that Supply Most Players to National Basketball Association

Rank	Institution	Conference	Alumni in NBA in 1981
1.	Indiana U.	Big 10	9
1.	U. of North Carolina	Atlantic Coast	9
1.	U. of Cal. at Los Angeles	Pacific 10	9
4.	Notre Dame U.	Independent	7
5.	U. of Maryland	Atlantic Coast	6
5.	U. of South Carolina	Independent	6
7.	Arizona State U.	Pacific 10	5
7.	U. of Detroit	Independent	5
7.	U. of Michigan	Big 10	5
7.	U. of Minnesota	Big 10	5
7.	U. of San Francisco	West Coast Athletic	5
12.	U. of Iowa	Big 10	4
12.	U. of Kentucky	Southeastern	4
12.	Marquette U.	Independent	4
12.	Oregon State U.	Pacific 10	4
12.	U. of Southern California	Pacific 10	4
12.	U. of Utah	Western	4
12.	U. of Washington	Pacific 10	4
19.	U. of Alabama	Southeastern	3
19.	Central Michigan U.	Mid-American	3
19.	DePaul U.	Independent	3
19.	Duke U.	Atlantic Coast	3
19.	U. of Houston	Southwest	3
19.	U. of Kansas	Big 8	3
19.	Cal. State U. at Long Beach	Pacific Coast	3
19.	Michigan State U.	Big 10	3
19.	U. of Nevada at Las Vegas	Independent	3
19.	North Carolina State U.	Atlantic Coast	3
19.	Ohio State U.	Big 10	3
19.	Rutgers State U.	Eastern	3
19.	St. John's U. (N.Y.)	Eastern College	3
19.	U. of Tennessee	Southeastern	3
19.	Villanova U.	Independent	3

Rank	Conference	Total number of alumni in NBA	Average number of alumni per institution
1.	Big 10	33	3.3
1.	Pacific 10	33	3.3
3.	Atlantic Coast	25	3.1
4.	Southeastern	18	1.8

SOURCE: DEPARTMENT OF GEOGRAPHY, EASTERN MICHIGAN UNIVERSITY

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News Summary

Articles on inside pages

John B. Slaughter will relinquish the directorship of the National Science Foundation to become chancellor of the University of Maryland at College Park. Story on Page 13.

Scientific literacy would improve if more science and mathematics courses were required of students majoring in other subjects, educators and scientists agreed at a recent meeting. Story on Page 8.

The Commonwealth Association of Students in Pennsylvania is considered one of the best-organized and most effective statewide student groups. Story on Page 6.

Plans to dismantle academic programs at the University of Missouri at Columbia have been shelved—at least for the time being. Story on Page 11.

Students with just two years of college behind them would be able to enter Harvard University's medical school under a recently proposed pilot program. Story on Page 12.

Two universities have taken the National Collegiate Athletic Association to court for allegedly depriving them of their rightful share of revenues from televised football games. Story on Page 10.

The Education Department says it can't meet its deadlines for resolving discrimination complaints against colleges and universities. Story on Page 13.

A moving force in the field of family history, Tamara Hareven, has just written a new study on the subject, *Family Time and Industrial Time.* Story on Page 19.

Israel's invasion of Lebanon has sparked student demonstrations at an Arab university on the occupied West Bank of the Jordan River. Story on Page 17.

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High Court Rejects Case of Professor Jailed for Not Revealing Tenure Vote

Contempt citation against Georgia's Dinnan allowed to stand; 2 similar cases pending

By CHERYL M. FIELDS

WASHINGTON

The Supreme Court refused last week to review the contempt-of-court conviction of James A. Dinnan, a University of Georgia professor who went to jail rather than reveal how he had voted in a tenure case.

The Court let stand without comment a ruling by the U. S. Court of Appeals for the Eleventh Circuit that the right to academic freedom must be limited by other societal goals and that the confidentiality of tenure decisions "cannot be used to give an institution of higher learning *carte blanche* to practice discrimination."

It was not known last week whether Mr. Dinnan would be asked again to reveal his tenure vote in further legal proceedings.

Mr. Dinnan, a professor of adult education and reading at Georgia, said in an interview with *The Chronicle* that he was disappointed, but that "eventually the Supreme Court will have to handle the question of peer review, since various other cases raising the same issue are winding their way through the courts."

"Eventually, if reason prevails, I think the concept of peer review by an academic community will stand."

At least two other cases raising similar issues are now in the federal courts:

The U. S. Court of Appeals for the Second Circuit heard arguments recently in a case in which a faculty member who was denied tenure at Fiorello H. La Guardia Community College is appealing a district court's decision barring him from finding out how individual members of his tenure committee voted.

The Supreme Court has not yet announced whether it will review a case in

Continued on Page 12, Column 1

WIDE WORLD

James A. Dinnan

States Warned Against Excessive Reliance on Tax-Exempt Bonds for Student Loans

By JANET HOOK

ST. PETERSBURG, FLA.

The use of tax-exempt state bonds to finance student loans—now approved in at least 10 states and under consideration in several others—may not be the "utopian solution" that some legislators believe it to be, higher-education officials have warned.

The bonds may be an important source of assistance to middle-income students who cannot get federal Guaranteed Student Loans because of new limits on eligibility, they say, but may benefit students at only a limited number of institutions—and not necessarily those colleges that need help the most.

At a time when the Reagan Administration is seeking new restrictions on the use of tax-exempt bonds, some college officials are wary of relying on them as an alternative source of student-loan money.

Bills setting up new bond authorities sailed through legislatures this year with little opposition.

'Loan-Authority Fever'

"You might call it 'loan-authority fever,' " said Joseph M. Cronin, president of the Massachusetts Higher Education Assistance Agency and chairman of a group that is monitoring the development of alternative loan programs.

Tax-exempt bonds have been regarded by some state legislatures as "a utopian solution to the problem of making credit available," Mr. Cronin said, because they provide a "state safety net" for students facing the loss of federal aid, and they require no outlay from state coffers.

Several other state legislatures are considering similar measures, Mr. Cronin said this month at a joint meeting here of the National Council of Higher Education Loan Programs—an association of agencies that administer the federal guaranteed-loan program in the states—and the National Association of State Scholarship and Grant Programs.

The pressure to approve alternative loan programs quickly has eased somewhat, Mr. Cronin said, because it seems less likely now that deep cuts will be made in the federal student-aid budget this year. However, student-aid officials here were warned that Guaranteed Student Loans

Continued on Page 14, Column 1

Coaches Ask Penalties for Colleagues Caught Cheating

By JOHN A. CROWL

DALLAS

At the instigation of several prominent coaches in big-time football, the National Collegiate Athletic Association will be asked to consider imposing stiff penalties on coaches and athletes who deliberately violate certain association rules.

To the surprise of many of the athletic directors and faculty representatives at the annual meeting of the College Football Association here, the organization's coaches' committee, headed by Vince Dooley of the University of Georgia, proposed the tough resolution.

"We recommend," Mr. Dooley said, "that any coach be suspended from coaching at all N.C.A.A. institutions for at least one year without pay for any of the following violations with regard to players or prospective players: illegal cash payments, gifts, loans, annuities, sale of players' tickets for more than their face value, or any other violations of a deliberate or extremely serious nature.

"If the violation occurs with the knowledge of the coach but without his direct involvement—in other words, he turns his head—he still would be subject to the one-year suspension without pay.

"Any athlete found knowingly guilty of accepting substantial illegal inducements would be declared permanently ineligible for further N.C.A.A. competition."

When one delegate observed that the penalties for athletes seemed stiffer than those for coaches, Tom Osborne, head

Continued on Page 10, Column 1

Higher academic standards for athletes were endorsed by the College Football Association. Story on Page 10.

Colleges Urged to Improve Science Courses for Non-Science Majors

By KIM McDONALD

RACINE, WIS.

Seeking to combat a serious decline in scientific literacy, more than 50 education and business leaders meeting here urged college administrators and faculty members to work to improve science and technology courses for students majoring in other fields.

"Liberal education is a failed idea as long as our students are shut out of, or only superficially acquainted with, knowledge of the kinds of questions science can answer and those it cannot," David S. Saxon, president of the University of California, told the meeting of educators, scientists, and administrators. He added that "watered-down versions of regular science courses, such as 'Physics for Poets' or 'Astronomy for Lovers,' are as offensive and insulting as would be 'Poetry for Physicists.' "

Participants in the three-day meeting sponsored by the Association of American Colleges and the American Association for the Advancement of Science sought to make recommendations that colleges and universities could follow in improving their science, mathematics, and engineering courses for students not majoring in those fields.

Mr. Saxon said any course of study in the sciences should help students understand physical laws, provide instruction in statistics and probability, and "convey the idea that science is not a collection of isolated facts, but a highly unified and consistent view of the world."

A National Academy of Sciences study released earlier this year found that the average liberal-arts or non-science major devoted only 7 per cent of his or her college course load to science.

'Willy-Nilly' Choices

Such students often get "inadequate teaching that stresses dull lecturing more often than exciting laboratory experiments and demonstrations," the report said, and "are often allowed to choose willy-nilly from an ever-growing cafeteria offering 'topics courses' that rarely fit into a well-conceived, comprehensive pattern of education."

Participants in the meeting here generally agreed that introductory courses covering the basic principles of science, mathematics, computers, and engineering should also deal with the ethical and moral questions raised by technology.

UNIVERSITY OF CALIFORNIA

David S. Saxon

Some said those courses should be given in the freshman and sophomore years, when the pressure to complete requirements in students' majors are least intense. Students who fulfill their mathematics requirements by examination should be required to enroll in advanced mathematics courses, they said.

Special programs to improve the understanding of science and technology among non-science majors at Lehigh University, the Massachusetts Institute of Technology, Stanford University, and Syracuse University were cited as models for other universities.

Participants in the meeting emphasized that developing new courses for students not majoring in science and improving the way they are taught would cost universities money and require a strong commitment from their faculty members.

Further Recommendations

In addition, they agreed that:

▶ Colleges and universities should require their students to take a minimum of 10 per cent of their courses in science and technology. Herman R. Branson, president of Lincoln University in Pennsylvania, said he thought the percentage should be greater because most students already take about that amount.

▶ To counteract the view, common among science faculty members, that teaching students who don't major in science is a waste of their time, colleges should reward professors who teach such courses with grants, salary increases, or other incentives.

▶ Colleges should require graduate students to help teach courses for non-science majors, under the close supervision of a faculty member. That would help to produce future faculty members with more experience in teaching such students.

▶ Senior faculty members, rather than administrators or junior faculty members, should develop the courses and programs for non-science majors.

▶ Instructors for the basic courses should avoid taking "elitist or authoritarian postures," and should encourage discussion instead of teaching "a set of hard-and-fast facts."

▶ Colleges should encourage students to take more science and mathematics courses in high school by making available—and, in some cases, strengthening—their admissions requirements in those areas. Many institutions do not publish those requirements now, participants said.

▶ College presidents and chief academic officers should encourage faculty members to improve the way they teach science and technology courses to make those subjects more attractive to students majoring in other fields.

Top administrators should also find a way to insure continued attention to the science-and-technology curriculum, perhaps by appointing a standing committee or a dean.

▶ Institutions that do not have engineering schools could improve teaching in technical courses for non-science majors by giving the faculty members who teach them leaves of absence to work in industry. Colleges could use specialists from industry as teaching aides and guest lecturers.

▶ Professional organizations, such as the American Association for the Advancement of Science, should focus national attention on scientific illiteracy and encourage government agencies and private foundations to help solve the problem. Associations should use their journals, meetings, and symposia to help colleges and faculty members design courses for non-majors.

Robert E. Wolverton, vice-president for academic affairs at Mississippi State University, reminded the meeting that even if all four-year institutions adopted the group's recommendations, problems would remain.

At many state institutions, such as his own, more than half of the students enter with junior-college degrees, Mr. Wolverton said, and "there's no way I can impose this on any of them."

Mark H. Curtis, president of the Association of American Colleges, said his organization was working on a list of minimum curriculum requirements that could be used by accrediting organizations in certifying bachelor's-degree programs.

He also said the A.A.C. would send a booklet containing the final recommendations from the meeting to all two-year and four-year institutions this fall.

FACT-FILE

Tenure Rates for Full-Time Faculty Members in 1981-82 and Change from Previous Year

	All institutions		Universities		Other 4-year institutions		2-year institutions	
	1981-82	Change	1981-82	Change	1981-82	Change	1981-82	Change
Public institutions								
Professors	96.3%	-0.1%	96.9%	+0.3%	95.5%	-0.5%	98.0%	+0.7%
Men	96.4%	0.0%	97.0%	+0.3%	95.5%	-0.6%	97.9%	+0.9%
Women	95.7%	0.0%	95.1%	+0.1%	95.3%	-0.1%	98.4%	+0.1%
Associate professors	84.5%	-0.7%	34.9%	-0.7%	82.4%	-0.8%	92.9%	+0.7%
Men	84.4%	-0.8%	84.8%	-0.9%	82.3%	-0.8%	93.2%	+0.3%
Women	85.0%	0.0%	85.8%	+0.6%	82.0%	-0.9%	92.2%	+1.4%
Assistant professors	32.0%	-0.4%	17.1%	-1.0%	35.5%	-0.1%	61.6%	+1.7%
Men	30.1%	-0.4%	14.8%	-1.0%	34.6%	-0.4%	63.9%	+2.6%
Women	35.6%	-0.4%	22.5%	-1.1%	36.9%	+0.2%	58.3%	+0.4%
Instructors	12.3%	-0.4%	5.9%	-0.9%	10.2%	-0.6%	22.6%	+0.4%
Men	13.3%	-0.5%	5.5%	-1.1%	11.1%	-0.6%	24.7%	+0.9%
Women	11.4%	-0.5%	6.1%	-0.8%	9.6%	-0.5%	20.7%	0.0%
Lecturers	2.6%	-0.5%	3.7%	-0.8%	0.1%	0.0%	26.8%	+3.8%
Men	3.2%	-0.7%	5.3%	-1.2%	0.2%	0.0%	21.1%	+2.9%
Women	2.0%	-0.3%	1.9%	-0.2%	0.0%	0.0%	29.7%	+4.7%
No academic rank	78.8%	+0.6%	1.0%	+0.3%	29.7%	+5.1%	80.6%	+0.5%
Men	81.9%	0.0%	1.5%	+0.4%	33.6%	+5.3%	83.8%	0.0%
Women	73.3%	+1.8%	0.0%	0.0%	22.7%	+4.6%	75.0%	+1.6%
All ranks	68.1%	+0.3%	66.1%	-0.3%	65.2%	+0.3%	76.3%	+1.1%
Men	72.8%	+0.2%	71.2%	-0.2%	70.6%	+0.2%	80.4%	+0.9%
Women	54.7%	+0.7%	43.7%	+0.1%	49.9%	+0.4%	69.3%	+1.6%
Private institutions								
Professors	94.0%	-0.1%	96.6%	-0.4%	92.3%	0.0%	82.7%	-0.4%
Men	94.2%	-0.2%	96.8%	-0.3%	92.4%	-0.1%	85.2%	-3.5%
Women	91.8%	+0.3%	94.1%	-1.3%	91.5%	+0.6%	77.1%	+6.3%
Associate professors	74.1%	-0.6%	75.6%	-0.8%	73.3%	-0.6%	81.6%	-0.6%
Men	74.3%	-0.9%	76.0%	-0.7%	73.4%	-1.0%	80.9%	-6.6%
Women	73.5%	+0.6%	73.9%	-0.9%	73.1%	+0.8%	82.8%	+9.3%
Assistant professors	16.1%	-0.6%	10.0%	-0.9%	18.3%	-0.5%	32.4%	-6.2%
Men	15.2%	-0.8%	9.0%	-0.9%	17.6%	-0.8%	35.3%	-6.7%
Women	17.7%	-0.4%	11.9%	-1.3%	19.4%	-0.1%	28.6%	-6.1%
Instructors	2.8%	0.0%	3.1%	-0.2%	2.6%	+0.2%	7.1%	-3.2%
Men	3.0%	-0.4%	2.5%	-1.2%	3.1%	0.0%	5.2%	-4.3%
Women	2.6%	+0.3%	3.8%	+0.8%	2.1%	+0.4%	8.6%	-2.2%
Lecturers	1.5%	-0.3%	1.7%	-0.1%	1.1%	-0.5%	0.0%	0.0%
Men	1.8%	-0.5%	1.8%	-0.3%	2.0%	-1.0%	0.0%	0.0%
Women	1.1%	0.0%	1.5%	-0.1%	0.0%	0.0%	0.0%	0.0%
No academic rank	47.9%	-1.3%	0.0%	-1.1%	48.4%	-0.3%	55.0%	-3.1%
Men	51.6%	-2.5%	0.0%	0.0%	52.7%	+0.5%	57.1%	-6.6%
Women	41.1%	+1.1%	0.0%	-2.3%	39.4%	-1.5%	51.1%	+2.8%
All ranks	55.7%	-0.1%	60.8%	-0.2%	53.4%	0.0%	49.2%	-4.2%
Men	61.3%	-0.3%	67.0%	-0.2%	59.4%	-0.2%	54.3%	-6.8%
Women	37.6%	+0.5%	35.8%	+0.3%	38.1%	+0.7%	41.9%	-0.5%

Note: Data are for full-time faculty members at institutions in the 50 states and District of Columbia reporting tenure information for both 1980-81 and 1981-82.

SOURCE: NATIONAL CENTER FOR EDUCATION STATISTICS

Syracuse's Technology Program Called a Model for Others

RACINE, WIS.

Plans for a new program to be offered at Syracuse University next fall provide a model that other universities could use in improving their undergraduate science courses for students majoring in other fields, said business and education leaders meeting here.

Michael Flusche, associate dean of arts and sciences at Syracuse, presented an outline of the program at the meeting, which was called to discuss ways to improve the scientific and technical literacy of non-science majors.

In the program at Syracuse, a "technology cluster" of four one-semester courses will include study of a laboratory science, basic principles of engineering and design, and social and moral questions raised by technology.

Using Microprocessors

Completion of the four courses will satisfy the natural-science requirements for undergraduates in the university's divisions of arts and sciences, communications, education, and social work.

Students will first have to complete a sequence of two one-semester courses in a laboratory science, chosen from offerings in biology, chemistry, geology, and physics.

They will then take a course in technology, which will introduce concepts of engineering design by using microprocessors—the tiny "thinking" elements of computers—and will examine ways engineers solve problems and make decisions. The students will also be taught how technology applies to the fields in which they completed the laboratory-science requirement.

For example, students who take the basic-biology sequence will study biotechnology, which includes biomedical engineering, cloning, genetic screening, pharmacology, and recombinant-DNA techniques.

Social Issues Introduced

The final course, which will be taught by both social-science and science faculty members, will introduce students to social issues raised by new developments in technology. For the students taking the biology sequence, those will include ethical problems in genetic engineering, the implications of patenting new life forms, the definition of when life begins, and chemical health hazards.

Mr. Flusche said the sequence would enable students to see the relevance of the initial science and engineering courses to the course on social problems.

The liberal-arts "core" curriculum at Syracuse, of which the technology cluster is a part, was developed using grants from the Andrew W. Mellon Foundation and the National Endowment for the Humanities.

Mr. Flusche said the Alfred P. Sloan Foundation had given the university $200,000 for three years to develop the technology portion—or third semester—of the technology cluster. Most of that money will be used for the salaries of faculty members.

—K.M.

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Title IX at X

While celebrating the anniversary, civil-rights and women's groups vow to fight any new moves to narrow federal rules against sex bias

By CHERYL M. FIELDS
WASHINGTON

Ten years ago:

▶ At least three women were teaching at prestigious colleges and universities without compensation—either because the colleges said they could not afford to pay them, or because their husbands were employed at the institutions and policies against nepotism forbade the women's employment.

▶ Female applicants were required to have higher Scholastic Aptitude Test scores than males to be admitted to many colleges and universities.

▶ There were no athletic scholarships for women.

▶ The widely used Strong Vocational Interest Blank had separate scoring systems for males and females—and pink tests for girls emphasizing "female" occupations and blue tests for boys dealing with "male" fields such as medicine and science.

All that has changed today, 10 years after the enactment of Title IX of the Education Amendments of 1972, which bars sex bias in federally assisted education programs or activities.

Colleges and universities have dropped the written and unwritten nepotism policies that kept husbands and wives from being employed by the same departments, or sometimes even the same institutions.

Title IX's ban on sex bias in admissions to graduate, professional, vocational, and public undergraduate education has ended higher academic requirements for female students and led to greatly increased numbers of women in medical, law, dental, and business schools.

More than 10,000 college scholarships were awarded to female athletes in 1981, and the Strong Vocational Interest Blank now uses one scoring system and one test form for both sexes.

Impact Far-Reaching

The impact of Title IX since it was enacted on June 23, 1972, has been far-reaching, and last week the National Coalition for Women and Girls in Education, an organization of 50 women's, civil-rights, and educational groups, staged a celebration of that fact at the Capitol here. They also pledged to fight any moves by the Reagan Administration to narrow the coverage of the act.

Edith Green, then Democratic Representative from Oregon and chairman of the House Special Subcommittee on Education, held hearings in 1970 that documented extensive discrimination in the way women were treated both in school and on the job. The hearings led to the passage of Title IX two years later—and to 10 years of controversy over it.

Although the statute also bars bias in such areas as admissions, counseling, employment, and student aid, much of the attention it has attracted in the last decade stemmed from its application to intercollegiate athletics—not surprising, since, at the time of its passage, some major football and basketball powers spent millions of dollars every year on men's intercollegiate sports and next to nothing on women's. (In 1974, for example, the average annual budget for women's sports in the Big 10 was $3,500.)

> **"It's clear that some areas have changed a lot and some hardly at all."**

Donna Brazile, field coordinator of the National Student Educational Fund, recalled recently that when she entered high school in 1973, she and other girls interested in playing basketball had to beg a physical-education teacher to coach them. Her high school, in a suburb of New Orleans, did agree to set up girls' basketball, volleyball, and softball teams, but they had to share one set of uniforms. One team sometimes had to cancel a scheduled game because another team needed the uniforms that day.

Still, the girls at her high school won the state basketball championships three years in a row and, as she put it, "moved from the back of the local newspaper's sports section to the front page."

By the time Ms. Brazile enrolled in Louisiana State University, she received a scholarship for basketball and track.

"But even in college," she said, "if the women were using the gym in the afternoon and the men needed to practice, the women had to get off the court. Or if the men had a game scheduled, we'd have to stop ours."

Recent investigations by the Education Department's Office for Civil Rights have found that at some universities, women's sports lag behind men's in such areas as scholarships, locker-room and practice facilities, travel, and promotion.

Under a new policy of "conciliation" and "nonconfrontation" begun last year by Education Secretary Terrel H. Bell, the civil-rights office has found the institutions in compliance with the law once they've promised to rectify the deficiencies.

Pervasive Effect on Athletics

Despite the continuing problems, Title IX has had a pervasive effect on intercollegiate athletics. By 1980, women made up 30 per cent of the participants in intercollegiate athletics, compared with 15 per cent before the enactment of Title IX.

One of the major fears expressed by men's athletic directors during the past decade was that Title IX would siphon money away from well-established men's programs, forcing administrators to skimp on men's teams or drop some sports.

But, in spite of pressure from the National Collegiate Athletics Association, the College Football Association, and some university presidents, Congress has ignored continued pleas to amend Title IX to exclude, explicitly, "revenue producing" sports from its coverage—or to omit such sports from the coverage of regulations that the Office for Civil Rights drafted to carry out the law.

According to estimates prepared by the Association for Intercollegiate Athletics for Women, universities that belonged to Division I of the N.C.A.A. spent an average of $1.2-million on their men's intercollegiate-athletics programs in 1973-74 and an average of $27,000 on their women's programs the same year. By 1981-82, the aver-

Continued on Page 12, Column 1

News Summary

Articles on inside pages

David A. Hamburg, professor of health policy and management at Harvard University, will succeed Alan Pifer as head of the Carnegie Corporation of New York. Story on Page 3.

Vartan Gregorian wants to re-establish the New York Public Library as "a living educational and cultural institution." Story on Page 6.

The Research Libraries Group is expecting a respite from its recent technical and financial problems, according to Edward E. Shaw, its outgoing president. Story on Page 8.

Plans for the American Open University will be shelved when the University of Mid-America goes out of business this year. Story on Page 8.

A budget proposal passed by the House of Representatives would provide less money for student loans than a similar measure approved by the Senate. Story on Page 11.

Edward A. Curran has been forced to resign as director of the National Institute of Education after a controversial nine-month term. Story on Page 11.

Scholars who "referee" manuscripts submitted to scientific journals are often biased against colleagues from less prestigious institutions. Story on Page 19.

Fellowships or grants have been awarded to more than 200 scholars by the American Council of Learned Societies. List of winners on Page 27.

The American University of Beirut has thus far escaped serious damage in the war in Lebanon. Two universities in Israel report that as many as a fourth of their students have been called up to fight. Stories on Page 17.

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FACT–FILE

Trends in Higher Education

Enrollment, staff, and degrees in 50 states and D.C.

	1970-71	1980-81	Change, 1970-71 to 1980-81	Projected for 1990-91	Projected change, 1980-81 to 1990-91
College-age population †					
18-24 years old	24,687,000	29,463,000	+ 19%	25,148,000	− 15%
25-34 years old	25,293,000	36,172,000	+ 43%	41,086,000	+ 14%
35-44 years old	23,142,000	25,721,000	+ 11%	36,592,000	+ 42%
Enrollment					
Total	8,581,000	12,097,000	+ 41%	12,101,000	0%
Public institutions	6,428,000	9,457,000	+ 47%	9,616,000	+ 2%
Private institutions	2,153,000	2,640,000	+ 23%	2,485,000	− 6%
4-year institutions	6,358,000	7,571,000	+ 19%	7,101,000	− 6%
2-year institutions	2,223,000	4,526,000	+ 104%	5,000,000	+ 10%
Men	5,044,000	5,874,000	+ 16%	5,770,000	− 2%
Women	3,537,000	6,223,000	+ 76%	6,331,000	+ 2%
Full time	5,815,000	7,098,000	+ 22%	6,536,000	− 8%
Part time	2,766,000	4,999,000	+ 81%	5,565,000	+ 11%
Undergraduate	7,376,000	10,475,000	+ 42%	10,334,000	− 1%
Graduate	1,031,000	1,343,000	+ 30%	1,437,000	+ 7%
First professional	175,000	278,000	+ 59%	330,000	+ 19%
Full-time equivalent	6,737,000	8,749,000	+ 30%	8,428,000	− 4%
Higher-education staff					
Instructional staff	573,000	846,000	+ 48%	799,000	− 6%
Full-time equivalent	451,000	624,000	+ 38%	589,000	− 6%
Earned degrees ‡					
Bachelor's	840,000	932,000	+ 11%	922,000	− 1%
Men	476,000	470,000	− 1%	452,000	− 4%
Women	364,000	462,000	+ 27%	470,000	+ 2%
First professional	38,000	72,000	+ 89%	74,000	+ 3%
Men	36,000	54,000	+ 50%	52,000	− 4%
Women	2,000	18,000	+ 800%	22,000	+ 22%
Master's	231,000	298,000	+ 29%	303,000	+ 2%
Men	138,000	148,000	+ 7%	151,000	+ 2%
Women	92,000	150,000	+ 63%	152,000	+ 1%
Doctor's	32,000	33,000	+ 3%	33,000	0%
Men	28,000	23,000	− 18%	18,000	− 22%
Women	5,000	10,000	+ 100%	15,000	+ 50%

Note: Because of rounding, details may not add to totals.

† Population projections are all Series II projections from the Bureau of the Census.

‡ Projected in 1980-81.

SOURCE: NATIONAL CENTER FOR EDUCATION STATISTICS

Nursing Enrollment Drops 5 Pct. in 2 Years

WASHINGTON

The number of full-time students enrolled in four-year nursing programs declined by 5 per cent in the past two years, the American Association of Colleges of Nursing has reported.

Even more serious, the association said, was a two-year decline of 6.5 per cent in full-time enrollment in master's-degree programs. The greatest shortage of nurses is among those prepared at the graduate level, the association said.

The association's survey of enrollment in nursing programs found an increase in enrollment of part-time students, particularly of registered nurses seeking bachelor's degrees in nursing.

In master's-degree programs in 1981-82, enrollment of part-time students was up by nearly 30 per cent from 1979-80, while the number of graduates at the master's level rose by 11.4 per cent.

In four-year programs, part-time enrollment rose 43 per cent in two years, but the number of those graduating in 1981-82 was only 2 per cent higher than it had been two years earlier.

The report was based on data from 205 colleges of nursing, which had responded to comparable surveys for the past three years.

"The shift of master's students from full-time to part-time study that was experienced in the fall of 1981 can be related to economic conditions in general and specifically to reduction in federal assistance for advanced nurse training," the association said.

Because of the longer time required for part-time students to complete requirements, it said, a decrease in the number of graduates can be predicted for the next few years.

Appropriations for Colleges in 22 States Up 6 Pct.

Twenty-two states that have appropriated funds for higher education in 1982-83 have provided 6 per cent more money than in they did in 1981-82, according to data compiled by M. M. Chambers, professor of educational administration at Illinois State University.

The increase is smaller than the same 22 states recorded in recent years. For example, their combined appropriations are up 20 per cent compared with appropriations of the same states two years ago and are up 210 per cent from their appropriations 10 years ago, Mr. Chambers said.

The appropriations reported by Mr. Chambers do not include local or federal funds, but do include state money for student-aid programs and higher-education boards as well as for the operation of colleges and universities.

In some cases, the amounts appropriated for higher education may be reduced by action of governors or by laws that prorate funds according to revenues.

	Appropriations for 1982-83	1-year change	2-year change	10-year change
Arizona	$322,525,000	+ 5%	+ 15%	+ 186%
Georgia	534,219,000	+ 7%	+ 24%	+ 200%
Idaho	104,019,000	+ 9%	+ 10%	+ 183%
Indiana	485,285,000	+ 1%	+ 6%	+ 130%
Iowa	381,112,000	+ 12%	+ 20%	+ 204%
Kansas	312,023,000	+ 12%	+ 20%	+ 235%
Kentucky	363,614,000	+ 2%	+ 18%	+ 195%
Maine	71,915,000	+ 8%	+ 15%	+ 114%
Maryland	432,654,000	+ 12%	+ 18%	+ 172%
Minnesota	520,920,000	− 5%	+ 9%	+ 199%
Nebraska	189,610,000	+ 1%	+ 14%	+ 234%
Nevada	71,929,000	+ 9%	+ 16%	+ 248%
New Mexico	184,084,000	+ 7%	+ 28%	+ 261%
North Dakota	108,539,000	+ 3%	+ 43%	+ 295%
Ohio	846,331,000	+ 15%	+ 18%	+ 178%
Oregon	240,519,000	− 5%	− 4%	+ 125%
South Dakota	53,503,000	+ 3%	0%	+ 58%
Texas	2,035,534,000	+ 7%	+ 39%	+ 339%
Vermont	37,691,000	+ 11%	+ 24%	+ 125%
Virginia	616,475,000	+ 13%	+ 21%	+ 232%
Washington	497,822,000	0%	+ 6%	+ 161%
West Virginia	193,137,000	+ 1%	+ 14%	+ 148%
22 states	$8,603,460,000	+ 6%	+ 20%	+ 210%

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News Summary

Articles on inside pages

Black administrators on white campuses complain they are "too many things to too many people." Story on Page 2.

Liberal-arts graduates can now receive provisional certification as high-school teachers in Virginia—a move greeted with approval at the annual meeting of the Southern Regional Education Board. Story on Page 3.

John William Ward, a historian and former president of Amherst College, takes over the presidency of the American Council of Learned Societies this week. Story on Page 7.

The University of Maryland may not charge out-of-state tuition to certain foreign students, the Supreme Court has ruled. Story on Page 11.

Fraud by scientists, a source of concern for many researchers, is the target of a policy under consideration by the National Institutes of Health for the reporting and handling of such cases. Story on Page 11.

Virginia's four-year-old plan for college desegregation hasn't worked, federal officials have charged, so the state has agreed to amend it. Story on Page 14.

The Administration will help Meharry Medical College maintain its accreditation with $30-million in federal aid and extended clinical teaching facilities at a nearby veterans' hospital. Story on Page 14.

A new anthology of American literature that would include more works by writers outside the official canon is under consideration by scholars. Story on Page 17.

Buildings on the campus of the American University of Beirut were damaged by artillery fire, but no one was injured. Story on Page 15.

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AAUP as a Union: the Tensions Endure

10 years after it decided to engage in collective bargaining, the association still sees friction among its members

By BEVERLY T. WATKINS

WASHINGTON

The American Association of University Professors has completed a decade as a faculty union, but it has not eliminated the internal tensions that resulted from its 1972 decision to engage in collective bargaining.

Conflicts have persisted between members who belong to A.A.U.P. chapters that engage in union activities and those who who do not. The conflicts have been intensified by the fact that the collective-bargaining chapters now have a majority of the A.A.U.P.'s members.

There are also conflicts among the association's staff members and leaders.

Association officials and delegates took two actions at the A.A.U.P.'s annual meeting here that they hope will relieve the tensions by stabilizing the top leadership and providing additional funds for collective-bargaining and other programs:

▶ The A.A.U.P. council approved what amounts to an open-ended contract for Irving J. Spitzberg, Jr., the general secretary, who was appointed in 1980. Mr. Spitzberg, whose reappointment was opposed by many members of the A.A.U.P. staff and some representatives of collective-bargaining chapters, will be the first chief administrative officer since 1974 to serve longer than two years.

▶ The delegates approved a dues structure based on "indexing," which will provide for small annual increases rather than the occasional large increases that have resulted in substantial membership losses.

Two years ago the delegates eliminated graduated dues and approved a structure that, in general, required active members to pay a flat rate of $47. As a result, individual dues increased by 5 to 400 per cent. The action was followed by a drop in membership from 75,600 in 1981 to about 70,000 today. Under the new system, A.A.U.P. dues will increase each year at the same rate as faculty salaries.

Since the average increase for 1982 was 9.9 per cent, according to the association's Committee Z on the Economic Status of the Profession, members' dues will increase by 9.9 per cent beginning January 1, 1983.

The association expects the change to provide an additional $150,000 in revenue for 1983.

CENSURE ACTIONS

Added to List

Eastern Oregon State College
Yeshiva University

Removed from List

Alabama State University
Northern State College (S.D.)
Southwestern Louisiana University
Texas A&M University

For summaries of the cases and a list of the institutions now under censure, see Page 10.

Debate over Reappointment

The most obvious evidence of friction within the A.A.U.P. came to light in the debate over Mr. Spitzberg's reappointment.

In an executive session, members of the Collective Bargaining Congress, which includes the A.A.U.P. chapters that engage in bargaining, considered recommending that "the current general secretary be given timely notice of nonreappointment" because, among other things, he had not provided leadership for "the most important programs of the association."

After an hour of debate, however, they decided instead to ask the A.A.U.P. council

Continued on Page 8, Column 1

Average Faculty Salaries Found Highest at Institutions with AAUP-AFT Unions

By JACK MAGARRELL

WASHINGTON

Faculty members represented by collective-bargaining agents had higher average salaries in 1981-82 than faculty members without unions, according to a report by the American Association of University Professors.

The report shows that average faculty salaries were highest at 24 institutions where faculty bargaining agents are affiliates of both the A.A.U.P. and the American Federation of Teachers (A.F.L.-C.I.O.). The average nine-month salary at the A.A.U.P.-A.F.T. institutions was $30,220.

At 40 institutions where A.A.U.P. affiliates are the bargaining agents, the average was $27,780. At 61 A.F.T. institutions the average faculty salary was $26,220; and at 43 institutions where affiliates of the National Education Association are the bargaining agents the average was $25,400.

The report, based on the A.A.U.P.'s annual study of faculty salaries and circulated at the organization's annual meeting here, did not include collective-bargaining data for two-year colleges.

For 168 four-year colleges and universities with collective-bargaining agreements, the average salary was $26,980, compared with $25,810 for 1,749 four-year institutions that do not have such agreements.

The groups of institutions whose faculty members are represented by the national unions contain different mixes of public and private colleges and universities. In each group, a majority of the institutions are public.

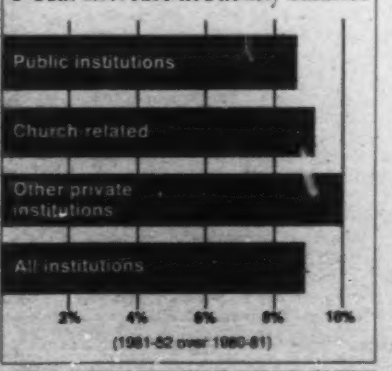
Of all institutions with collective bargaining, 26 per cent are private.

Private institutions make up 49 per cent of those whose faculty members are represented by the A.A.U.P., 26 per cent of those where the A.F.T. represents the faculty, and 19 per cent of those where the N.E.A. is the bargaining agent. There are no A.A.U.P.-A.F.T. affiliates representing the faculty members at private institutions.

The A.A.U.P. report made no attempt to identify other institutional differences that

Continued on Page 10, Column 1

1-Year Increase in Faculty Salaries



SOURCE: AMERICAN ASSOCIATION OF UNIVERSITY PROFESSORS

FACT-FILE

9-Month Faculty Salaries for 1981-82

Averages at 4-year institutions, by union status

	Professor	Associate professor	Assistant professor	Instructor	All ranks
No collective bargaining (1,749 institutions)	$33,500	$25,310	$20,830	$16,360	$25,810
With collective bargaining (168 institutions)	34,160	26,420	21,220	17,200	26,980
Represented by American Association of University Professors (40 institutions)	34,950	26,390	21,150	17,190	27,760
Represented by American Federation of Teachers (A.F.L.-C.I.O.) (61 institutions)	33,370	25,570	20,700	16,280	26,220
Represented by affiliates of both A.A.U.P. and A.F.T. (24 institutions)	37,340	29,960	23,800	18,560	30,220
Represented by National Education Association (43 institutions)	31,730	24,840	20,570	17,630	25,400

Average pay and distribution of men and women

	Average salary		1-year change		Women's share of faculty jobs	Distribution	
	Men	Women	Men	Women		Men	Women
Category I: University level *							
Professor	$36,750	$32,900	+ 9.5%	+ 8.8%	6.5%	44.4%	12.8%
Associate professor	27,010	25,270	+ 9.0%	+ 8.4%	17.5%	29.3%	25.8%
Assistant professor	22,270	20,480	+ 9.7%	+11.4%	31.4%	21.6%	41.0%
Instructor	17,400	16,190	+ 7.5%	+ 8.6%	54.0%	3.0%	14.3%
Lecturer	20,540	17,600	—	—	46.0%	1.7%	6.1%
All ranks	29,920	22,510	+ 9.4%	+ 9.3%	19.4%	100.0%	100.0%
Category IIA: College level **							
Professor	31,500	30,430	+ 8.1%	+ 8.8%	12.3%	37.1%	15.0%
Associate professor	25,150	24,040	+ 8.8%	+ 8.7%	21.0%	32.4%	24.9%
Assistant professor	20,810	19,740	+ 8.4%	+ 7.0%	36.6%	24.3%	40.4%
Instructor	17,030	16,110	+10.1%	+ 7.5%	53.5%	5.3%	17.6%
Lecturer	17,830	15.500	—	—	44.5%	0.9%	2.1%
All ranks	25,950	21,680	+ 8.5%	+ 7.9%	25.8%	100.0%	100.0%
Category IIB: Bachelor's-degree level ***							
Professor	27,510	25,660	+ 9.3%	+ 6.5%	13.2%	30.1%	11.0%
Associate professor	22,130	20,710	+ 9.2%	+ 8.7%	22.6%	31.1%	21.8%
Assistant professor	18,540	17,560	+ 8.7%	+ 8.2%	38.0%	30.1%	44.3%
Instructor	15,450	14,520	+ 8.7%	+ 7.7%	52.7%	8.2%	21.9%
Lecturer	18,210	19,220	—	—	44.3%	0.5%	1.0%
All ranks	22,100	18,490	+ 9.1%	+ 8.3%	29.4%	100.0%	100.0%
Category III: 2-year-college level							
Professor	27,670	26,700	+ 9.0%	+ 9.6%	22.1%	22.3%	10.7%
Associate professor	24,070	23,330	+ 8.6%	+ 8.9%	31.5%	31.7%	24.6%
Assistant professor	20,360	19,500	+ 8.8%	+ 8.2%	40.5%	30.5%	35.1%
Instructor	17,300	16,270	+ 8.9%	+ 7.7%	52.6%	15.3%	28.7%
Lecturer	16,820	14.990	—	—	73.5%	0.2%	0.9%
All ranks	22,690	20,240	+ 8.8%	+ 8.5%	37.2%	100.0%	100.0%
Category IV:							
Institutions without ranks	23,390	21,040	+ 8.6%	+ 8.5%	36.6%	—	—
All categories except IV							
Professor	33,920	30,290	+ 9.1%	+ 8.5%	9.7%	38.6%	13.0%
Associate professor	25,570	23,960	+ 8.9%	+ 8.6%	20.6%	30.7%	24.7%
Assistant professor	21,070	19,620	+ 9.1%	+ 9.1%	35.1%	24.1%	40.6%
Instructor	16,890	15,870	+ 8.8%	+ 6.8%	53.3%	5.2%	18.5%
Lecturer	19,730	17,110	—	—	46.4%	1.2%	3.2%
All ranks	27,200	21,300	+ 9.0%	+ 8.6%	24.3%	100.0%	100.0%

* Institutions that confer at least 15 doctoral degrees annually in at least three disciplines
** Institutions that award degrees beyond the bachelor's degree but do not qualify for Category I
*** Institutions that award only the bachelor's degree

SOURCE: AMERICAN ASSOCIATION OF UNIVERSITY PROFESSORS

Women in College Development Earn 20 Pct. Less than Men

WASHINGTON

Women working in the field of "institutional advancement"—regardless of their experience, educational background, and other qualifications—earn 20 per cent less than men in the same jobs, a survey by the Council for Advancement and Support of Education has found.

The survey covered job responsibilities, reporting relationships, and salaries of people who work in fund raising, public relations, alumni affairs, periodical and publication editing, and government relations. A report of the survey's findings was published last week in the July-August issue of the council's magazine, *CASE Currents*.

According to the report, men have a higher annual salary than their female counterparts in almost every job category. The salary gap is greater at public than at private institutions.

Lower Pay Partly Explained

The report said the women typically were slightly less experienced in the field, were younger, had been in their current positions for shorter periods of time than the men and, consequently, were less likely to hold top positions.

However, the report said, those factors do not fully explain the salary differences and "apparently women are paid less than men, independent of other qualifications."

According to the report, a typical worker in the field at a four-year college is 35 years old, holds a bachelor's degree, has five years of experience, and has been employed at the same institution for three years. If male he will earn an annual salary of $22,943. If female she will earn $19,102, or 20 per cent less than a man in the same job.

Among other findings: The average annual salary in the field is $27,179, the median salary is $25,813, and one in four advancement professionals earns less than $20,000 per year.

Fund Raising Predominates

The survey found that fund raising was the predominant responsibility of people in the field. A third of the survey's respondents said they worked on the fund-raising staff of their institutions, and 4 of every 10 said fund raising was their primary responsibility, regardless of the department in which they work.

The findings are based on responses to questionnaires sent to a random sample of CASE member representatives in all of the organization's eight districts across the country. The survey was conducted for CASE by Judy K. VanSlyke, an assistant professor of public relations at Syracuse University's S. I. Newhouse School of Public Communications. The project was coordinated by Virginia Carter Smith, a CASE vice-president.

Copies of the issue of *CASE Currents* containing the report on the survey are $4 each and may be ordered from CASE Publications Order Department, P.O. Box 298, Alexandria, Va. 22313.

—P.D.

Academic Salaries Set by Politics, Not Marketplace, Economist Says

NEW HAVEN, CONN.

Politics may be pushing aside the law of supply and demand in determining faculty salaries, an economist here has concluded.

If faculty salaries were determined only by supply and demand, they would be a lot lower than they are now, says Stephen P. Dresch, chairman of the Institute for Demographic and Economic Studies.

Faculty salaries lagged behind the earnings of all male adults employed full time by more than 20 per cent between 1967 and 1978, Mr. Dresch says, but have not fallen far enough behind to eliminate an excess supply of would-be faculty members.

That the rules of the market are not working in faculty employment, he says, "is indicated by the queues of new Ph.D.s and displaced junior faculty [members] competing for the few openings available, even for those which are only temporary."

The nonmarket process that is determining faculty salaries, he suggests, "is essentially political," exercised through direct and indirect government appropriations.

The workings of supply and demand would tend to keep salary levels at all colleges and universities roughly the same, Mr. Dresch says, but during the past decade there has been a dramatic rise in salary variations among institutions.

If the setting of faculty salaries has shifted from the market to the political arena, he says, there is increased incentive for faculty members as a group to try to influence the political process.

"Thus," he says, "the faculty is converted from a professional group with a vaguely common identity overshadowed by disciplinary identities to a politico-economic class with a clear common interest which can be served only by collective political action."

Other facets of academic affairs may follow salaries into politics, Mr. Dresch says.

"As long as state action constitutes a critical determinant of the economic status of higher education, and hence of faculty, the pressures toward politicization will be irresistible."

Mr. Dresch's analysis, in a paper called "The Weakening of the Academic Labor Market and the Politicization of Academe," was prepared in part for the U.S. Education Department's Postsecondary Education Policy Development Center.

—JACK MAGARRELL

Faculty Salaries Found Highest at Institutions with Unions

Continued from Page 1

might contribute to the differences in average salaries.

The overall average salary for male faculty members in 1981-82 was $27,200, compared with $21,300 for women, the A.A.U.P. said.

The salary data, prepared for the A.A.U.P. by Maryse Eymonerie Associates, were based in part on information gathered by the Department of Education's National Center for Education Statistics. Officials of the A.A.U.P. said the organization's annual report of salary averages for individual institutions would not be available until late July.

Over all, the national averages reported by the A.A.U.P. were in line with salary trends indicated by earlier surveys.

The A.A.U.P. reported an average salary of $25,750 for all faculty ranks at all types of colleges and universities, an increase of 9 per cent over the average for 1980-81.

The National Center for Education Statistics last month reported an overall average increase of 9.2 per cent in faculty salaries.

Last November, a report by *The Chronicle*, based on a scientific sampling of individual faculty members, estimated the overall increase at 8.9 per cent.

W. Lee Hansen, professor of economics at the University of Wisconsin at Madison and chairman of the A.A.U.P. salary committee, compared the increases with an average inflation rate estimated by the A.A.U.P. at 8.6 per cent for the year ending June 30.

Compared with the previous year, average salaries for 1981-82 were up 9.0 per cent for full professors, 8.8 per cent for associate professors, 9.1 per cent for assistant professors, and 8.2 per cent for instructors, Mr. Hansen said.

The average one-year increase for faculty members at public institutions was 8.7 per cent, he said, compared with 9.2 per cent at church-related institutions and 10 per cent at other private institutions.

By type of institution, the average increases were 9.4 per cent at Ph.D.-granting universities, 8.4 per cent at institutions with some graduate programs, 8.9 per cent at institutions granting only bachelor's degrees, 8.5 per cent at two-year colleges, and 8.6 per cent at institutions that have no faculty ranks.

The average salary of faculty members employed at the same institution in both 1980-81 and 1981-82 rose 9.9 per cent, Mr. Hansen said. In that category of faculty members continuing at the same institution, full professors received raises averaging 9.4 per cent; associate professors, 10.0 per cent; assistant professors, 10.7 per cent, and instructors, 10.6 per cent.

He told delegates at the A.A.U.P.'s annual meeting that although average salaries had risen more than the cost of living in the past year, the purchasing power of those salaries had declined by more than 20 per cent in the last decade.

Some improvement can be expected in 1982-83, he said, but any increase in purchasing power would probably be due more to reduced inflation than to higher salaries.

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News Summary

Articles on inside pages

Collective-bargaining agreements should have more specific provisions covering faculty layoffs, members of the American Federation of Teachers were told at their annual meeting last week. Story on Page 3.

Officials of the National Education Association are being pressed to do more for members who teach at colleges and universities. Story on Page 3.

Medical colleges have been urged to develop guidelines to promote ethical standards among researchers. Story on Page 8.

College enrollment rose to over 12 million last fall, 2.3 per cent more than in the fall of 1980. Freshman enrollment rose by less than half of 1 per cent. Fact-File on Page 10.

The Supreme Court will hear arguments next fall on whether a college football player may sue his coach for physical and mental abuse. Story on Page 11.

Harry M. Singleton, [illegible], who was a Deputy Assist[illegible]ecretary of Commerce, will succeed Clarence Thomas as the chief civil-rights officer in the Department of Education. Story on Page 11.

The Vietnam War is the subject of recent scholarly studies that concentrate on the way government policy concerning the conflict was made. Story on Page 19.

Many Israeli students and faculty members are taking part in protests against their country's invasion of Lebanon. Story on Page 17.

Great Britain is dropping its membership in the International Institute for Applied Systems Analysis in Vienna, following a similar decision by the United States government. Story on Page 18.

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State Nursing School May Not Bar Men, Supreme Court Rules in 5-to-4 Vote

Some legal experts think decision will open all professional schools to coeducation

By KIM McDONALD

WASHINGTON

The Supreme Court has ruled that a state-supported nursing school cannot constitutionally exclude men from its programs.

In a 5-to-4 vote, the Court agreed with the U.S. Court of Appeals for the Fifth Circuit that the admissions policy of the nursing school at the Mississippi University for Women violated the equal-protection clause of the Constitution by discriminating against men.

Although the decision appeared to be limited to the nursing school and did not say anything about the institution's overall admissions policy, which also excludes men, legal experts said they believed it was broader in scope.

Joy R. Simonson, director of the National Advisory Council on Women's Educational Programs, which advises the Education Department, said the decision would set a precedent that would eventually force all graduate and professional schools to "open the doors" to coeducational programs.

However, she said, it would not apply to private single-sex undergraduate institutions, which are excluded from federal laws prohibiting sex discrimination in college admissions.

Justice Sandra Day O'Connor, who wrote the majority opinion, called "unpersuasive" the state's argument that excluding men from the school compensated for discrimination against women and thus constituted affirmative action.

Rather, she said, the policy "tends to perpetuate the stereotyped view of nursing as an exclusively woman's job.

"By assuring that Mississippi allots more openings in its state-supported nursing schools to women than it does to men, M.U.W.'s admissions policy lends credibility to the old view that women, not men, should become nurses, and makes the assumption that nursing is a field for women a self-fulfilling prophecy."

The Mississippi University for Women is one of only two state-supported institutions in the country that admit only women as undergraduates. The other, Texas Woman's University, does admit men to its nursing school, health-science program, and graduate school. At least two public institutions, Citadel Military College of South Carolina and Virginia Military Institute, have all-male enrollments.

The Court's opinion left the status of those institutions' admissions policies uncertain.

Marcia Greenberger, managing attorney for the National Women's Law Center, said the decision "sets up a very clear standard" that exclusion by sex by public institutions must further, rather than retard, affirmative-action goals.

Chief Justice Warren E. Burger said in a brief dissent that "since the Court's opinion relies heavily on its finding that women have traditionally dominated the nursing profession, it suggests that a state might

Continued on Page 12, Column 1

The texts of the majority and dissenting opinions in the Supreme Court's decision appear on Pages 12 through 15.

Student Loans Drop 35 Pct. in Latest Quarter

By JANET HOOK

WASHINGTON

Only two-thirds as many federally guaranteed student loans were made in the first three months of 1982 as in the same period last year.

Reports from some states indicate that the trend is continuing, although there are wide variations from state to state, with some reporting decreases of as much as 50 per cent and a few reporting increases.

State and federal officials say it is too early to tell whether the total number of loans will be down, since most of the applications for the fall have yet to be processed. About half of all loans are usually made in July, August, and September.

According to the Department of Education, the number of Guaranteed Student Loans made in the three months ending March 31—the most recent period for which nationwide figures are available—was 35 per cent lower than in the same three months of 1981. There was a 1.6-per-cent decline in the period from last October through December, which means the number of loans was 16 per cent lower in the six months after October 1, when the federal government tightened its eligibility requirements, than in the previous year.

Federal and state loan officials say that several factors may have contributed to the decline in the number of loans:

▶ New federal rules may have led many families with incomes over $30,000 to assume incorrectly that they were ineligible for loans. The regulations require such families to meet a "needs test" but do not make them automatically ineligible.

▶ Bureaucratic tie-ups in the Department of Education this spring delayed the release of new regulations governing loans made for next fall. As a result, many state loan agencies and colleges postponed processing loan applications for academic 1982-83.

▶ Many students, who might otherwise have applied last October or later for loans for 1981-82, rushed to arrange their loans earlier to beat the October 1 date for the new income limitations to take effect.

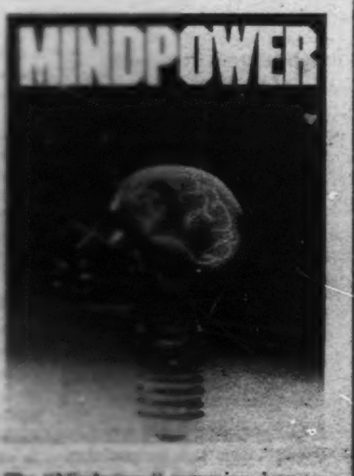
▶ The wide publicity given to the proposals to impose even tighter restrictions made early this year by the Reagan Administration may have led some students to think they would be unable to obtain a loan—even though those proposals were not approved by Congress. "I think a lot of people thought that something had happened," says Joy Copeland, a student-loan official in the Department of Education.

The amount of money students have borrowed is also down, although not by as much as the number of loans. It increased by 9 per cent from October through December, and decreased by 31 per cent from January through March—a 7-per-cent decline for the six months.

The fact that the amount borrowed did not drop as sharply as the number of loans suggests that students are taking out larger sums than last year, department officials said.

Loan officials note that the nationwide figures obscure wide variations among the states. Decreases in the number of loans

Continued on Page 16, Column 1



The "Mindpower" campaign, inaugurated a year ago this week by the Council for Advancement and Support of Education, is cosponsored by 1,200 colleges. For a profile of Charles M. Helmken, who thought up "Mindpower," see Page 4.

FACT–FILE

Enrollment Last Fall: Up 2.3 Pct.

WASHINGTON

Total college enrollment in the United States rose to 12,371,672 last fall, an increase of 2.3 per cent over the fall of 1980, the National Center for Education Statistics has reported.

The federal agency's detailed tabulation of students on American campuses shows an increase larger than its earlier estimate, based on a sampling of colleges and universities, of 1.9 per cent.

The latest N.C.E.S. figures show freshman enrollment rose by less than half of 1 per cent last fall, in a year in which the number of 18-year-olds in the U.S. declined by 2 per cent, according to the Census Bureau's estimates.

Total undergraduate enrollment was up 2.6 per cent last fall. Enrollment of graduate and professional students remained virtually unchanged from the previous fall.

The nearly 4.5 million students reported at public two-year colleges represented an increase of 3.5 per cent over the fall of 1980.

Enrollment of women rose by 2.8 per cent to a total of nearly 6.4 million, while the number of men enrolled increased by 1.7 per cent to 5,975,056.

The enrollment of part-time students grew by 3.8 per cent to 5,190,422. Part-time students now account for more than 40 per cent of all students. The number of full-time students rose by only 1.2 per cent.

Enrollment at private colleges and universities grew during the past year at a rate of 3.2 per cent, to a total of 2,724,640. At public institutions they rose 2 per cent, to 9,647,032.

At private two-year colleges, enrollment increased 19.2 per cent to 235,503.

—JACK MAGARRELL

	All students			Full-time students			Part-time students		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
Public institutions									
Universities	2,152,474	1,140,122	1,012,352	1,655,211	905,408	749,803	497,263	234,714	262,549
1-year change	− 0.1%	− 0.5%	+ 0.4%	0.0%	− 0.6%	+ 0.7%	− 0.5%	− 0.3%	− 0.6%
Other 4-year institutions	3,013,850	1,427,713	1,586,137	1,961,424	970,852	990,572	1,052,426	456,861	595,565
1-year change	+ 1.3%	+ 1.1%	+ 1.8%	+ 1.2%	+ 0.8%	+ 1.7%	+ 1.5%	+ 1.6%	+ 1.4%
2-year colleges	4,480,708	2,018,965	2,461,743	1,629,870	826,621	803,249	2,850,838	1,192,344	1,658,494
1-year change	+ 3.5%	+ 2.8%	+ 4.1%	+ 2.2%	+ 1.8%	+ 2.5%	+ 4.3%	+ 3.5%	+ 4.9%
All public institutions	9,647,032	4,586,800	5,060,232	5,246,505	2,702,881	2,543,624	4,400,527	1,883,919	2,516,608
1-year change	+ 2.0%	+ 1.4%	+ 2.5%	+ 1.1%	+ 0.7%	+ 1.6%	+ 3.1%	+ 2.5%	+ 3.5%
Private institutions									
Universities	748,870	412,403	336,467	527,797	302,961	224,836	C221,073	109,442	111,631
1-year change	+ 0.2%	− 1.2%	+ 1.9%	− 0.7%	− 1.5%	+ 0.3%	+ 2.3%	− 0.4%	+ 5.1%
Other 4-year institutions	1,740,267	870,353	869,914	1,240,844	635,886	604,958	499,423	234,467	264,956
1-year change	+ 2.7%	+ 2.2%	+ 3.2%	+ 1.7%	+ 1.1%	+ 2.2%	+ 5.4%	+ 5.2%	+ 5.5%
2-year colleges	235,503	105,500	130,003	166,104	71,109	94,995	69,399	34,391	35,008
1-year change	+19.2%	+27.3%	+13.4%	+ 4.9%	+ 4.8%	+ 5.0%	+77.0%	+128.5%	+44.9%
All private institutions	2,724,640	1,388,256	1,336,384	1,934,745	1,009,956	924,789	789,895	378,300	411,595
1-year change	+ 3.2%	+ 2.7%	+ 3.8%	+ 1.3%	+ 0.6%	+ 2.0%	+ 8.3%	+ 8.8%	+ 7.9%
All institutions, public and private									
Universities	2,901,344	1,552,525	1,348,819	2,183,008	1,208,369	974,639	718,336	344,156	374,180
1-year change	0.0%	− 0.7%	+ 0.8%	− 0.2%	− 0.8%	+ 0.6%	+ 0.4%	− 0.4%	+ 1.0%
Other 4-year institutions	4,754,117	2,298,066	2,456,051	3,202,268	1,606,738	1,595,530	1,551,849	691,328	860,521
1-year change	+ 1.8%	+ 1.5%	+ 2.1%	+ 1.4%	+ 0.9%	+ 1.9%	+ 2.7%	+ 2.8%	+ 2.6%
2-year colleges	4,716,211	2,124,465	2,591,746	1,795,974	897,730	898,244	2,920,237	1,226,735	1,693,502
1-year change	+ 4.2%	+ 3.8%	+ 4.5%	+ 2.4%	+ 2.0%	+ 2.8%	+ 5.3%	+ 5.1%	+ 5.5%
All institutions	12,371,672	5,975,056	6,396,616	7,181,250	3,712,837	3,468,413	5,190,422	2,262,219	2,928,203
1-year change	+ 2.3%	+ 1.7%	+ 2.8%	+ 1.2%	+ 0.6%	+ 1.8%	+ 3.8%	+ 3.5%	+ 4.1%
New first-year students, public and private									
Universities	396,030	204,378	191,652	370,328	192,685	177,643	25,702	11,693	14,009
1-year change	− 0.7%	− 1.6%	+ 0.2%	− 1.8%	− 2.5%	− 1.1%	+18.4%	+16.3%	+20.2%
Other 4-year institutions	777,234	366,546	410,688	682,949	325,833	357,116	94,285	40,713	53,572
1-year change	− 0.9%	− 1.1%	− 0.7%	− 0.6%	− 0.7%	− 0.5%	− 3.0%	− 4.0%	− 2.1%
2-year colleges	1,422,157	646,756	775,401	684,437	333,315	351,122	737,720	313,441	424,279
1-year change	+ 1.3%	+ 0.9%	+ 1.5%	− 0.2%	− 1.0%	+ 0.7%	+ 2.6%	+ 3.1%	+ 2.3%
All institutions	2,595,421	1,217,680	1,377,741	1,737,714	851,833	885,881	857,707	365,847	491,860
1-year change	+ 0.3%	− 0.1%	+ 0.7%	− 0.7%	− 1.2%	− 0.2%	+ 2.4%	+ 2.6%	+ 2.2%

Undergraduate, graduate, and professional students

	Fall, 1981				Total fall enrollment			1-year-changes	
	Men		Women						
	Full time	Part time	Full time	Part time	1979	1980	1981	1979 to 1980	1980 to 1981
Undergraduate	3,180,801	1,397,204	3,111,104	1,815,862	8,820,657	9,267,748	9,504,971	+ 5.1%	+ 2.6%
Graduate	256,575	314,788	189,486	340,423	1,069,749	1,099,652	1,101,272	+ 2.8%	+ 0.1%
Professional	175,414	17,522	72,914	8,745	263,404	277,767	274,595	+ 5.5%	− 1.1%*
Unclassified	100,047	532,706	94,909	763,173	1,416,069	1,451,728	1,490,834	+ 2.5%	+ 2.7%
Total	3,712,837	2,262,219	3,468,413	2,928,203	11,569,899	12,096,895	12,371,672	+ 4.6%	+ 2.3%

Total enrollment by states

Alabama	166,375	Illinois	659,623	Montana	35,959	Rhode Island	68,339
Alaska	24,754	Indiana	251,826	Nebraska	93,507	South Carolina	132,394
Arizona	205,169	Iowa	143,105	Nevada	39,936	South Dakota	35,015
Arkansas	76,032	Kansas	138,453	New Hampshire	48,524	Tennessee	200,183
California	1,885,757	Kentucky	144,154	New Jersey	322,797	Texas	716,297
Colorado	167,977	Louisiana	174,656	New Mexico	60,413	Utah	97,048
Connecticut	162,367	Maine	44,012	New York	1,014,863	Vermont	30,573
Delaware	32,061	Maryland	229,936	North Carolina	295,771	Virginia	286,015
District of Columbia	86,653	Massachusetts	417,830	North Dakota	35,446	Washington	278,080
Florida	426,570	Michigan	513,033	Ohio	521,396	West Virginia	82,375
Georgia	191,384	Minnesota	210,713	Oklahoma	162,825	Wisconsin	275,325
Hawaii	48,121	Mississippi	105,974	Oregon	149,924	Wyoming	21,236
Idaho	42,756	Missouri	243,672	Pennsylvania	517,879	U.S. total	12,371,672

* Decline due to over-reporting of professional students in several states in 1980

SOURCE: NATIONAL CENTER FOR EDUCATION STATISTICS

Half the States Expect Deficits in Year Ahead

WASHINGTON

Half of the 50 states expect their spending to exceed their income in fiscal 1983, according to a survey by the National Governors' Association and the National Association of State Budget Officers.

That means digging into reserve balances, a practice that a number of states have already followed to the point that they have virtually no balances left.

The annual assessment of the fiscal condition of the states concludes that "the current fiscal year is proving to be a difficult one for state governments" under the combined impact of the economic recession and federal-aid cuts. That means a difficult time also for public colleges and universities, which rely on state appropriations for nearly half of their income.

The report of the governors' and budget officers' associations says that 34 states spent more than they took in during fiscal 1981, that 37 expect to be in that situation in fiscal 1982, and that 25 anticipate their revenues will fall short of expenditures in fiscal 1983.

In fiscal 1981, according to the report, the states reduced their combined treasury balances by $5.3-billion, ending the year with an average balance equal to 4.5 per cent of the year's spending. Authorities consider a 5-per-cent balance to be a safe margin.

The combined balance estimated for fiscal 1982 dropped sharply, to only 1.5 per cent of the year's budgets. For fiscal 1983 the balance is expected to decline even further, to 1.1 per cent.

The survey found that 19 states had ended fiscal 1981 with balances of 5 per cent or more, but only 12 expected to do so in fiscal 1982, and 14 in fiscal 1983.

Treasury balances of 10 per cent or more are anticipated in fiscal 1982 by eight states: Hawaii, Kansas, Montana, Nevada, New Mexico, North Dakota, and Wyoming. For fiscal 1983, balances of 10 per cent or more have been forecast only for Kansas, Nevada, and Wyoming.

Copies of the report, *Fiscal Survey of the States, 1981-82*, are available for $4 each from the National Governors' Association, 444 North Capitol Street, Washington 20001.

—JACK MAGARRELL

Brockport to Drop 52 Faculty Jobs

BROCKPORT, N.Y.

In response to declining enrollment, the State University of New York College at Brockport has announced the cancellation of 52 faculty positions, two academic programs, and three majors to take effect in June, 1983.

The cuts, which will eliminate majors in German, geography, and music, as well as programs in botany and communications disorders, came after a year of deliberation by a panel of senior faculty members and administrators at Brockport. Of the positions to be cut, 37 are held by tenured professors, 8 by people already retiring or resigning, and 4 by teachers with nonrenewable contracts. Three positions are already vacant.

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News Summary

Articles on inside pages

Syracuse University has the most prestigious school of public administration in the country, according to a recent ranking. Story on Page 2.

Research relationships between industry and universities are marred by industry's emphasis on "short-term profits and product improvement," officials say. Story on Page 3.

The Office for Civil Rights may not investigate the University of Richmond's athletic department, a federal district judge has ruled, because the department receives no direct federal aid. Story on Page 9.

State agencies that help administer the federal Guaranteed Student Loan program have been accused of accumulating more money than they need for their operations. Story on Page 9.

Photocopying at academic libraries has increased significantly since Congress passed the Copyright Act of 1976, according to a recent survey. Story on Page 9.

The Justice Department defends the federal government's efforts to desegregate public colleges and universities in a brief filed in U.S. district court. Story on Page 10.

Science fiction has been hurt by the penchant among publishers for million-dollar book deals, scholars in the field agree. Story on Page 15.

The MacArthur Foundation has named 19 new fellows, who will receive five-year grants of up to $300,000. Story on Page 21.

Bir Zeit University has been closed by Israeli military authorities for the third time in a year. Story on Page 13.

The University of Glasgow has angered potential donors to its library collections by its decision to sell some nineteenth-century books and photographs. Story on Page 13.

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Higher Education's Drinking Problem

Colleges are abandoning their traditional 'benign neglect' and are combating students' abuse of alcohol with stricter rules, counseling, and special courses

By ZOË INGALLS

A few months ago, when the Tar Heels of the University of North Carolina won the National Collegiate Athletic Association's basketball championship, jubilant fans, most of them students, celebrated by going on a drinking binge that resulted in thousands of dollars in property damage in dormitories and the town of Chapel Hill. They broke windows and windshields, bent lampposts, wrecked furniture, and smashed walls.

Last October, a car driven by a Stanford University student careered into a tree at 60 miles per hour. The student suffered two broken arms, but survived. Two passengers, also students, were killed. The driver has been charged with vehicular manslaughter and drunken driving.

A little over a year ago, a 20-year-old student at the University of South Carolina drank too much during a fraternity hazing and died as a result.

PENNSYLVANIA STATE UNIVERSITY

Those are not isolated incidents. Some colleges report that as much as 80 per cent of the vandalism on their campuses is alcohol-related. Over 90 per cent of the deaths that occur as the result of hazing are connected with alcohol, according to some studies. And the leading cause of death among young people aged 18 to 24 is traffic accidents, more than half of them the result of drunk driving.

The Drug of Choice

Disruptive or destructive drinking behavior on college campuses is nothing new. What is new is a willingness on the part of everyone from deans to fraternity presidents to accept the fact that alcohol is the drug of choice on college campuses—the "biggie," as one student put it—to acknowledge that alcohol abuse among students is a major problem, and to commit time and resources to doing something about it.

Traditionally, universities have adopted an attitude of "benign neglect" toward drinking, says Gerardo M. Gonzalez, a prominent educator and researcher on alcohol at the University of Florida. In part that has been because of society's ambivalence about the drug, and in part because knowledge about alcohol-related problems—and the options available for doing something about them—has been limited.

"People assumed you went to college, drank up, had a good time, and graduated," he says. "Now, they're beginning to realize that the problem of alcohol abuse is a national problem with tremendous personal and economic costs."

Why the change? "I suspect what happened was that as we started to look at drug use in the late 60's, what came up in study after study was that the major drug in use was alcohol," says Ruth C. Engs, associate professor of health and safety education at Indiana University and a leading researcher in alcohol studies.

Added to that was a growing openness in society generally, recognition by the medical profession that alcoholism is a disease, a new emphasis on physical fitness and well-being, and increased public concern about such problems as drunken driving and the "fetal alcohol syndrome"—defects in newborns resulting from their mothers' drinking too much.

"We've passed the [days of] the Dean Martin giggly drunk and the Red Skelton fall-down drunk," says Bruce E. Donovan, associate dean of the college at Brown University. "The courage of people like Betty Ford or Joan Kennedy [who have publicly admitted to having drinking problems] has made it an O.K. thing to deal with. It's caught on in the public imagination."

Hard Times Blamed

On campuses, Mr. Gonzalez says, the "heightened sensitivity" among college officials to the problems caused by excessive student drinking is due partially to harder economic times. "When the universities have to fix damaged toilets and broken windows, when they see that attrition is related to alcohol use, when they begin to see that excessive drinking is having a negative effect on institutional life, they start to have a greater concern for the costs of this problem," he says.

What exactly is the scope of the problem? Research findings vary.

A *Chronicle* survey of deans of student affairs, conducted this year at 181 two-year and four-year colleges and universities nationwide, found that about 75 per cent of students are drinkers. The survey was conducted for *The Chronicle* by John Minter Associates, a Boulder, Colo., research organization.

Mr. Gonzalez, who surveyed nearly 2,000 college students on vacation at Daytona Beach, Fla., last year, found that a higher proportion—about 88 per cent—of those youths drank.

Even that figure is low compared with the results of a 1978 study of 34 New England colleges by the Medical Foundation of Boston, a health-research group, which found that 95 per cent of college students drank. It is high, however, compared with a 1977 study of 13 colleges nationwide by Ms. Engs, who reported that 79 per cent

Continued on Page 6, Column 1

MARGINALIA

Here are more winners in the Summer Marginalia Contest, which this year features job-rejection letters received by our readers—funny letters, insulting letters, insensitive letters, generous letters.

•

DEAR DR. ____________

A list of five finalists for the position of ____________ has been compiled. Your name is not on the list.

•

The following is the first job-rejection letter one contestant ever received. It came in response to an interview in senior year, arranged by the university personnel office.

DEAR

Our interviewer,

, told me how much he enjoyed his meeting with you on

at

I have carefully compared the information you provided to

with our present employment opportunities. Unfortunately, there is not a suitable opening in our organization for a person with your particular background and experience.

I feel certain that with your fine qualifications you will have little difficulty in locating a desirable career opportunity upon your graduation from

To that end, I wish you success.

Sincerely,
JOHN DOE
Personnel Manager

"What I had received," writes the contestant, "was a blank form letter in an envelope addressed to me."

•

A winner in the "most demoralizing" category:

"A review of your application suggests that your qualifications and/or work experience are not similar to that of a successful hall director in this residence-hall system."

•

For brevity, this one is hard to beat:

T:

Just a note to say that we are "full up."

•

Dear

Thank you for your application. As a mathematician, I can't say I am certain that we have no position for you, but as a practical man, I am quite certain. If your few publications were so notable as to put you in contention, in this job market, I would have heard of them.

•

DEAR PERSON:

The position in philosophy that you have applied for is now filled.

(The foregoing was printed on a postal card—by one of those duplicators that use purple ink. —C.G.)

In Brief

Registrars See Little Change in Enrollment Next Fall

Enrollment projections by registrars of more than 2,500 colleges and universities indicate that the number of students next fall will be about the same as a year ago.

The survey, completed last week by the National Association of College Stores, showed that registrars expected a slight drop in enrollment at four-year institutions, offset by a slight gain at two-year colleges.

"We were expecting a negative effect from college-aid cutbacks and the economy," said Garis Distelhorst, executive director of the college-store association, "but if the estimate holds, enrollment will be stable."

Financial Emergency Declared in Idaho

Idaho's board of education has declared a financial emergency in the state's colleges and universities because of a 9-per-cent cut in spending ordered by Gov. John V. Evans.

The formal declaration legally suspended tenure and other rules, enabling administrators to lay off faculty members and nonacademic employees with only 30 days' notice. Layoffs and the elimination of some academic programs are likely, campus officials say, because of a projected $42-million deficit in the state budget for fiscal 1983.

Kansas Regents Agree to Cut Budgets 4 Pct.

The Kansas board of regents, at a meeting last week with Gov. John Carlin, agreed to cut the fiscal 1983 budgets of the state's universities by 4 per cent.

Governor Carlin had ordered state agencies to cut spending by 4 per cent during the year ending next June 30 because of a shortfall in state revenues. The regents agreed, at the governor's request, to make a similar reduction.

Stanley Z. Koplik, executive officer of the board, said no immediate decisions were made on how to make the $11.2-million reduction in university spending. He said the board did pledge not to reduce faculty pay raises already approved and not to increase student fees in the fall.

Further Cuts Ordered in Oregon, Washington

The state legislatures in Oregon and Washington have ordered additional cuts in higher-education appropriations amounting to 1 per cent and 2 per cent respectively.

The new cuts were approved at special sessions of the legislatures last month. Both states have been hit hard by a recession in the forest-products industry.

When added to previous cuts, the latest reductions mean that spending for the 1981-83 biennium will be down 8.4 per cent in Oregon and 8.7 per cent in Washington.

U. of Louisville Cuts 37 Faculty Positions

The University of Louisville has eliminated 37 full-time faculty positions, 11 of which were held by tenured professors, and 77 staff positions for the next academic year, because of decreases in state financial support and in tuition income.

The cuts were made in programs in social work and health, physical education, and recreation, and in the medical and dental schools.

Larry Mehlhauser, director of planning and budget, said the university had been able to "phase out" most of the faculty members by negotiating early retirement or by "buying out" their contracts.

President Plans Bicycle Trip to Help Struggling College

JUDSON BAPTIST COLLEGE

The president of Judson Baptist College in Oregon plans to bicycle across the United States this summer in an effort to keep his financially troubled institution open.

Herbert E. Anderson, 66, above, plans to leave from the campus July 31, accompanied by 20 students who will earn credits in physical education for the trip. They plan to arrive in Washington, D.C., by August 30. Mr. Anderson hopes to raise $250,000 from meetings with church groups along the route and from sponsors pledging money for each mile the bicyclists travel.

With an enrollment of 300 students, the college has been in financial difficulty since 1979, when it moved from Portland to a new campus in The Dalles. A promised $1-million loan fell through that same year, and the four-year institution has been struggling to pay its bills ever since.

Oakland U. President Rejects Salary Increase

Joseph E. Champagne, president of Oakland University, has turned down a recommendation by the board of trustees that would have increased his salary by 10 per cent.

Citing a "need for restraint" in "harsh economic times," Mr. Champagne, whose term began last year, said No to the committee that recommended the increase after reviewing his performance in office.

Mr. Champagne earns $62,000 a year.

President of Miami-Dade Vetoes Video-Game Plan

Pac-Man has been barred, at least temporarily, from campuses of Miami-Dade Community College by President Robert H. McCabe. When the president's council of chief administrators and faculty representatives recommended approval of Pac-Man and other video games in campus buildings, Mr. McCabe exercised his presidential veto.

He had mixed feelings about the games, he said, and bounced the issue to the college's board. Board members' attitudes also were mixed, so they bounced it right back to Mr. McCabe for a final decision.

The president said the games were "an excellent source of revenue," and would earn Miami-Dade an estimated $100,000 or more.

"My own concern is that we don't want to draw the students away from serious work," he said.

Embassy Studies Attacks on Nigerians in Wisconsin

The Nigerian Embassy sent a representative to Wisconsin last week to investigate two attacks on Nigerian students that left one student dead and another hospitalized with several broken bones.

Sani Tela, who attended the University of Wisconsin–Stout, died following the June 19 attack. A university spokesman said Mr. Tela had apparently been beaten—or possibly run over by an automobile—after an evening spent at a bar in Menomonie, where the campus is located. He was reportedly accompanied earlier that evening by a white woman with whom he had been living. Police are still investigating the case.

Earlier this month, three students at the University of Wisconsin at Stevens Point were beaten following an exchange of invective in a local bar. One is still in the hospital with a broken leg and other injuries, a campus spokesman said.

Auditor Lists Irregularities at U. of Northern Iowa

Iowa's state auditor has turned over to the state department of criminal investigation a report on irregularities totaling more than $10,000 in the accounts of the University of Northern Iowa's minority-group program.

The audit lists missing equipment, including vacuum cleaners, sewing machines, and a piano; unauthorized telephone charges; loans—not yet repaid—to people who were not students; and improper leasing of an automobile for the use of Norris Hart, director of educational-opportunity programs and special community services.

A university spokesman said that Mr. Hart, who oversaw all minority-group programs at the university, had been removed from his post and placed on "earned leave."

President of Medgar Evers Requests Reassignment

Richard D. Trent, president of Medgar Evers College of the City University of New York, ended a four-month confrontation with students and residents of the Crown Heights section of Brooklyn last week by asking the university's governing board to grant him a yearlong sabbatical and then assign him to another post.

The board was expected to honor his request at a meeting late last week.

Mr. Trent's critics charged that he had been an ineffective leader and had not responded to requests for day-care facilities, black-studies courses, and lighter teaching

Syracuse, Indiana Ranked Highest in Public Administration

Syracuse University has the most prestigious school of public administration and Indiana University has the most productive, according to a study that ranks such schools by reputation and number of journal articles published.

They were ranked by the heads of 118 graduate programs in public administration or public affairs. Rankings in productivity were based on the number of articles by faculty members or graduate students published in 10 journals between 1970 and 1980.

The authors of the study said it was the first attempt to rank programs in public administration. The study was conducted by researchers at the University of Oklahoma's Bureau of Government Research and the University of South Carolina's Department of Government and International Studies.

Results of the study were published by the American Society for Public Administration in *Public Administration Review*.

Following is a list of the top 20 schools of public administration and public affairs, ranked according to reputation for quality and the number of journal articles published.

Reputation	Productivity
1. Syracuse U.	1. Indiana U.
2. Harvard U.	2. U. of Georgia
3. U. of Southern California	2. Syracuse U.
4. Indiana U.	4. U. of Southern California
5. U. of California, Berkeley	5. State U. of New York, Albany
6. U. of Texas, Austin	5. U. of California, Berkeley
7. Princeton U.	7. Harvard U.
8. U. of Pittsburgh	8. American U.
9. U. of Michigan, Ann Arbor	9. Ohio State U.
10. U. of Georgia	10. U. of Maryland
11. Carnegie-Mellon U.	11. U. of Illinois, Urbana
12. U. of Minnesota	12. U. of Pittsburgh
13. Ohio State U.	13. U. of N. Carolina, Chapel Hill
14. American U.	14. 14. Cornell U.
15. U. of N. Carolina, Chapel Hill	14. U. of California, Davis
16. Florida State U.	14. U. of Michigan
17. U. of Kansas	17. Virginia Polytechnic Inst.
18. George Washington U.	18. U. of California, Irvine
19. Virginia Polytechnic Inst.	18. U. of Kansas
20. State U. of New York, Albany	20. Pennsylvania State U.

SOURCE: AMERICAN SOCIETY FOR PUBLIC ADMINISTRATION

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Higher Education's Drinking Problem

Continued from Page 1

of the students she sampled drank. Howard T. Blane of the University of Pittsburgh, who published a review in 1977 of more than 70 studies of college drinking conducted over the previous 30 years, points out that drinking varies—and so do the results of surveys—according to geographical region. Therefore, he prefers to say only that somewhere between 70 and 95 per cent of college students use alcohol.

Although they disagree over the exact extent of student drinking, most researchers say the number of students who drink has not changed significantly since the mid-1970's.

Whether 70 per cent or 95 per cent of students drink is ultimately an irrelevant question to most college officials, many of whom report that excessive drinking and related problems of alcohol abuse are on the rise.

"I hear it everywhere I go," says Mr. Gonzalez: " 'Boy, do we have a drinking problem here! We're the No. 1 party school in the country!' "

Some 36 per cent of the deans surveyed by *The Chronicle* believe there has been an increase in the amount of excessive drinking by students over the last five years. In addition, a number of them also reported increases in student-behavior problems over the same period, as a result of drinking: 23.8 per cent said they had observed an increase in driving after drinking, 29.8 per cent said there was more vandalism due to drinking, and 26.5 per cent reported an increase in fighting as a result of alcohol use.

Results of other research suggest that excessive drinking is not on the rise, but that awareness of drinking problems among college and university officials is.

"It's interesting that administrators think that excessive drinking is up," says Mr. Gonzalez, "but I wonder whether it is simply their own heightened sensibility or what is actually happening."

Ruth Engs agrees: "There's always been vandalism, only now it's associated with drinking. It's the old 'conversion reaction.' When someone is converted to Buddhism, he sees a Buddhist in every tree. I think that's what happened to [many administrators]," she says.

'Responsible Drinking'

Along with a greater concern has come an increase in the options available to administrators. Recognizing that moralistic and authoritarian approaches stressing abstinence do not work, educators have developed a number of programs and activities to encourage "responsible drinking."

No longer are universities saying that drinking is "evil or has to be troublesome," says Mr. Donovan of Brown, which has instituted a number of programs designed to foster the responsible use of alcohol. "We're saying there is a kind of use that is appropriate to a civilized social setting. Using alcohol is not the be-all and end-all of an event. It is to add pleasure to an event."

Most colleges have broadened the definition of irresponsible drinking to include not just alcoholism, but the whole range of problems students can run into when they use alcohol—from things as minor as hangovers, missing classes, and failing to meet term-paper deadlines to more serious problems such as vandalism, accidents, violence, and drunken driving.

The means vary from campus to campus, but the most successful programs are designed to:

- ▶ Educate students about alcohol and the relationship between consumption and negative consequences.
- ▶ Combat what one official calls the "nothing-to-do-but-drink syndrome" by providing attractive alternatives for recreation.
- ▶ Counsel and treat students who have problems.
- ▶ "Intervene" by confronting students who have problems and making certain that they get help.

"We're saying there is a kind of use that is appropriate to a civilized social setting. Using alcohol is not the be-all and end-all of an event."

In addition, a growing number of colleges now set guidelines for all social events held on their campuses and require that students register parties in advance to make certain that the guidelines are followed. Rutgers University, for example, prohibits blatant promotion of alcohol as the focus of a party, requires that at least half of the money spent on refreshments be used to pay for food and nonalcoholic beverages, and requires that nonalcoholic beverages be available at the same place and displayed with the same prominence as alcoholic beverages.

Two-thirds of the institutions responding to the survey said they had banned the drinking of alcohol at athletic events and about one-fourth said they had banned it in fraternity and sorority houses.

One of the most visible and, according to many, successful programs on college campuses today is offered under the auspices of a national, nonprofit organization called BACCHUS, which promotes responsible drinking through student-run chapters at 60 colleges in 28 states and Canada.

BACCHUS was founded in 1976 by Mr. Gonzalez, who is now its president, while he was a doctoral candidate in counselor education at the University of Florida. He became interested in alcohol-related problems and helped form a university "task force" on alcohol abuse.

The students in the group said, " 'Task force' isn't sexy enough. We need something catchy to indicate that we're not anti-alcohol or anti-drinking," Mr. Gonzalez recalls. BACCHUS, the name of the god of wine, was selected. It is also the acronym for what later became the group's rarely used full name: "Boost Alcohol Consciousness Concerning the Health of University Students."

BACCHUS takes a common-sense approach, one that is "credible for students and one they can embrace," says Mr. Gonzalez.

While accepting "that young people have always indulged in drinking and probably always will, [BACCHUS] encourages moderation in the use of alcohol among students who drink and respect for the choice of students who abstain," according to a pamphlet distributed by the group.

"[Our approach] is so common sense, I think it's been overlooked," says Mr. Gonzalez. "That's a comment I hear a lot—'Gee, it makes so much sense. It makes so much sense.' "

Organized by Students

BACCHUS's chapters are organized by students, usually with the aid of a faculty member or administrator who acts as adviser. Although they must subscribe to the goals and philosophy of BACCHUS, the chapters are semi-autonomous, planning their own activities and setting their own policies.

BACCHUS's national headquarters—in the student-services office at the University of Florida—serves as an information clearinghouse, provides training for chapter officers, makes available various publications, and helps chapters with any problems that arise.

The organization's success is attributed in part to those organizational features. "The program has enough structure so that it has identity, but it's very flexible and adaptable to any university system or situation," says Paula L. Swinford, director of health education at the University of Illinois at Urbana-Champaign, which joined BACCHUS in 1981.

The other key ingredient, say supporters, is student participation, through which BACCHUS gains "the built-in credibility necessary in an effort of this kind," says Mr. Gonzalez.

"A lot of students know more about alcohol after taking an alcohol-education course, but they may not have changed their behavior."

"A reaction that we as experts often get is that we are on a prohibitionist campaign or some kind of moralist crusade," he says. "When our [message] comes from students, that perception is broken down more quickly."

Students involved in the program agree. "When people first hear about it, they say 'BACCHUS? Oh, that's a bunch of teetotalers,' " says Lisa B. Schwartz, a senior at the University of Florida and president of its BACCHUS chapter. "We say 'Oh, no, we have a great time. We party like everybody else.' "

"Once they get to know us," she continues, "they really like us."

An 'Alternative Social Club'

David Suchman, a psychologist at the University of Florida who counsels students with alcohol and drug problems, agrees that some students view BACCHUS as an organization of teetotalers—"to be borne, and not with joy." But for others it offers a "kind of alternative social club," he says.

The University of Florida's BACCHUS chapter works with the Campus Alcohol Information Center and the Interfraternity Council. (An "alcohol facilitator," a student paid by the university's student-services office and the council to act as liaison with fraternities and sororities, attends all BACCHUS meetings.)

The activities held during an alcohol-awareness week last spring on the Florida campus are typical of their efforts. BACCHUS and the information center publicized the events with posters and with advertisements in local and student newspapers, arranged for alcohol educators and others to appear on television talk shows, showed films about alcohol, and invited guest speakers who talked on topics ranging from hazing to drunken-driving laws.

'Moonshine Runs'

They ran panel discussions, workshops, and a debate—on the pros and cons of increasing the penalties for drunken driving—and set up exhibits outside the student union, where students gave away free Gatorade and "party-planning kits" that discussed the ins and outs of "responsible hosting."

On the lighter side, they sponsored two-mile and five-mile footraces at night, called "moonshine runs." All participants received T-shirts with the BACCHUS logo.

The week ended with a party at the university's on-campus rathskeller. Ads in the student newspaper included a coupon that could be exchanged for one free "alternative beverage," a soft drink or glass of fruit juice. Those who drank alcoholic beverages could use a "breathalyzer" when they left the rathskeller, to learn about the physiological effects of imbibing.

Although BACCHUS is the only national alcohol program on college campuses today—and is "in many ways a summation of what is already in the field," as Ruth Engs of Indiana University puts it—numerous colleges have developed their own programs to address problems of abuse.

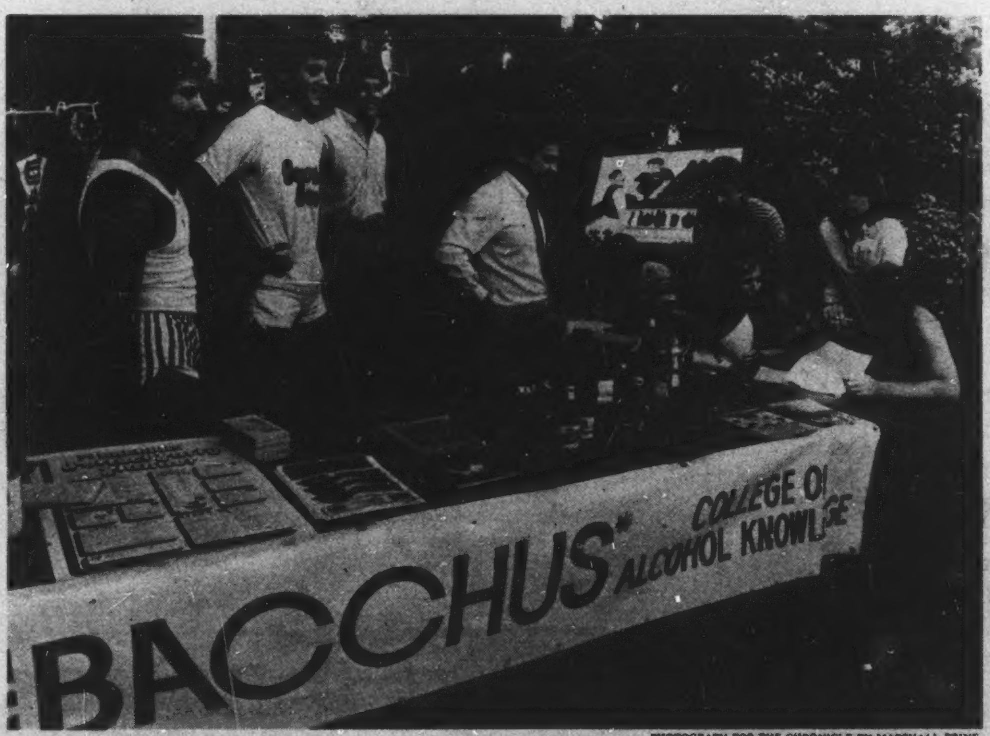
Indeed, 68.5 per cent of the colleges and universities covered by the *Chronicle* survey have programs to educate their students about the effects of alcohol, and 44.2 per cent have programs to treat abusers.

Dartmouth College, for example, has instituted a campuswide alcohol-education and abuse-prevention effort, with strong support from President David T. McLaughlin. Dartmouth sponsored a three-day national conference in January, which examined the widespread nature of drinking problems and attempted to pinpoint solutions.

Penn State's Program

Pennsylvania State University's "Total Alcohol Awareness Program," or TAAP is often cited for its comprehensiveness and for the dedication of William L. Eck, an associate professor of health education who founded and runs the program.

Brown University, which was one of the pioneers in recognizing and adopting policies and programs aimed at reducing alcohol abuse, recently organized a "support group" for the children of alcoholics, called Sons and Daughters. Such groups, as well as individual counseling programs, are well on their way to becoming the "big fad, the 'in' thing"



PHOTOGRAPH FOR THE CHRONICLE BY MARSHALL PRINE

Members of BACCHUS, a student group at the University of Florida. set up a display to distribute information on the responsible use of alcohol.

CHRONICLE SURVEY

Alcohol on Campus: A Survey of Colleges' Problems and Policies

	All institutions	Private universities	Private liberal-arts colleges	Church-related institutions	Public 4-year institutions	Public 2-year colleges	Northeast		South-Southeast		Midwest		West-Southwest	
							Private	Public	Private	Public	Private	Public	Private	Public
Per cent of students who drink:														
Excessively *	16.1%	15.0%	15.2%	15.3%	19.9%	12.2%	14.5%	14.4%	15.7%	13.5%	16.1%	21.3%	12.2%	18.1%
Socially **	52.1%	52.7%	54.1%	54.0%	51.1%	52.7%	53.9%	46.0%	44.1%	56.3%	57.3%	42.8%	50.3%	58.9%
Experimentally ***	26.3%	21.4%	27.2%	25.4%	32.1%	21.1%	19.2%	38.7%	27.2%	23.3%	23.7%	27.3%	32.0%	24.4%
Not at all	24.7%	26.3%	25.1%	25.7%	22.1%	27.0%	18.6%	20.4%	31.5%	25.7%	25.1%	20.8%	33.9%	27.0%
Per cent of students needing treatment for alcohol abuse:	5.6%	3.1%	3.5%	3.3%	7.6%	4.6%	2.9%	12.5%	3.0%	4.3%	3.5%	6.4%	3.5%	3.2%
Per cent of students leaving college because of alcohol	2.3%	1.4%	2.9%	2.8%	2.1%	2.8%	1.2%	2.6%	2.3%	2.5%	2.6%	2.2%	3.6%	2.3%
Per cent of institutions reporting increases in the last five years:														
In excessive drinking by students	35.9%	32.0%	36.5%	32.3%	47.6%	29.0%	39.3%	53.3%	26.7%	46.7%	37.2%	27.8%	25.0%	36.0%
In student use of marijuana	17.1%	22.0%	17.3%	17.7%	11.9%	19.4%	17.9%	6.7%	13.3%	20.0%	23.3%	11.1%	18.8%	20.0%
In student use of cocaine	40.9%	44.0%	51.9%	48.4%	42.9%	19.4%	57.1%	33.3%	40.0%	26.7%	34.9%	16.7%	75.0%	48.0%
In faculty and staff use of alcohol	22.1%	24.0%	25.0%	16.1%	19.0%	19.4%	10.7%	20.0%	13.3%	20.0%	37.2%	22.2%	25.0%	16.0%
In number of students seeking help for alcohol problems	44.2%	42.0%	46.2%	48.4%	59.5%	29.0%	39.3%	53.3%	53.3%	26.7%	44.2%	72.2%	43.8%	36.0%
Per cent of institutions reporting increases in alcohol-related behavior problems in the last five years:														
Bad hangovers	21.0%	16.0%	19.2%	14.5%	31.0%	22.6%	25.0%	40.0%	6.7%	33.3%	16.3%	16.7%	18.8%	24.0%
Drinking before or while driving	23.8%	24.0%	19.2%	17.7%	31.0%	22.6%	21.4%	20.0%	26.7%	20.0%	18.6%	38.9%	25.0%	28.0%
Drinking before class	15.5%	10.0%	11.5%	12.9%	19.0%	25.8%	10.7%	26.7%	6.7%	20.0%	11.6%	11.1%	12.5%	28.0%
Missing class	22.1%	18.0%	23.1%	19.4%	28.6%	16.1%	10.7%	20.0%	20.0%	20.0%	25.6%	0.0%	25.0%	44.0%
Getting lower grades	23.8%	22.0%	28.8%	22.6%	28.6%	9.7%	17.9%	20.0%	33.3%	26.7%	25.6%	5.6%	31.3%	28.0%
Fighting	26.5%	40.0%	11.5%	21.0%	33.3%	22.6%	39.3%	33.3%	6.7%	33.3%	25.6%	27.8%	18.8%	24.0%
Damaging property	29.8%	36.0%	23.1%	24.2%	47.6%	9.7%	42.9%	40.0%	20.0%	26.7%	20.9%	27.8%	37.5%	32.0%
Loss of memory	29.8%	36.0%	23.1%	24.2%	47.6%	9.7%	42.9%	40.0%	20.0%	26.7%	20.9%	27.8%	37.5%	32.0%
Doing something later regretted	24.3%	28.0%	15.4%	21.0%	38.1%	16.1%	32.1%	26.7%	6.7%	33.3%	23.3%	16.7%	12.5%	36.0%
Per cent of institutions that have:														
Special programs														
To educate about effects of alcohol	68.5%	76.0%	73.1%	75.8%	73.8%	38.7%	71.4%	86.7%	86.7%	46.7%	76.7%	66.7%	62.5%	44.0%
To treat effects of excessive use	44.2%	56.0%	42.3%	46.8%	50.0%	19.4%	50.0%	60.0%	66.7%	26.7%	51.2%	55.6%	25.0%	16.0%
Alcohol-awareness days	45.9%	48.0%	40.4%	48.4%	64.3%	25.8%	50.0%	73.3%	53.3%	40.0%	41.9%	50.0%	31.3%	36.0%
Advertising campaigns	33.7%	40.0%	26.9%	38.7%	50.0%	9.7%	35.7%	46.7%	26.7%	26.7%	41.9%	33.3%	12.5%	28.0%
Staff to handle alcohol problems	61.9%	76.0%	59.6%	67.7%	61.9%	41.9%	71.4%	53.3%	73.3%	46.7%	62.8%	72.2%	68.8%	44.0%
Alcoholics Anonymous	21.0%	22.0%	19.2%	21.0%	28.6%	16.1%	32.1%	33.3%	13.3%	33.3%	18.6%	22.2%	12.5%	12.0%
Al-Anon	12.2%	18.0%	11.5%	14.5%	11.9%	6.5%	21.4%	26.7%	6.7%	13.3%	14.0%	0.0%	12.5%	4.0%
Alcohol-education course	21.0%	24.0%	15.4%	17.7%	28.6%	12.9%	28.6%	13.3%	20.0%	33.3%	16.3%	27.8%	12.5%	16.0%
Alcohol-education units in academic courses	29.8%	32.0%	9.6%	12.9%	47.6%	35.5%	35.7%	60.0%	20.0%	33.3%	16.3%	38.9%	6.3%	40.0%
Referrals to professional counselors and therapists	86.2%	92.0%	86.5%	87.1%	90.5%	71.0%	89.3%	100.0%	93.3%	73.3%	90.7%	88.9%	81.3%	72.0%
Per cent of institutions that permit drinking of alcoholic beverages:														
Everywhere	2.2%	0.0%	1.9%	0.0%	2.4%	6.5%	0.0%	6.7%	0.0%	6.7%	0.0%	5.6%	6.3%	0.0%
In university housing	34.8%	28.0%	57.7%	51.6% †	38.1%	3.2%	46.4%	20.0%	46.7%	13.3%	39.5%	16.7%	43.8%	36.0%
In fraternity houses	16.0%	8.0%	26.9%	16.1%	21.4%	0.0%	21.4%	13.3%	13.3%	6.7%	14.0%	11.1%	25.0%	16.0%
In sorority houses	12.2%	8.0%	15.4%	9.7%	19.0%	0.0%	10.7%	13.3%	6.7%	6.7%	9.3%	11.1%	25.0%	12.0%
In the student union	31.5%	38.0%	28.8%	30.6%	33.3%	16.1%	50.0%	46.7%	40.0%	20.0%	27.9%	16.7%	12.5%	24.0%
In campus dining areas	18.2%	26.0%	5.8%	11.3%	26.2%	16.1%	28.6%	13.3%	13.3%	20.0%	11.6%	11.1%	6.3%	36.0%
At athletic events	3.3%	6.0%	0.0%	1.6%	7.1%	0.0%	0.0%	0.0%	0.0%	0.0%	4.7%	0.0%	6.3%	12.0%
Per cent of institutions that prohibit drinking of alcoholic beverages:														
Everywhere	53.0%	54.0%	44.2%	51.6% †	47.6%	74.2%	39.3%	66.7%	53.3%	53.3%	53.5%	55.6%	50.0%	60.0%
In university housing	27.1%	30.0%	11.5%	16.1%	42.9%	32.3%	3.6%	60.0%	26.7%	40.0%	25.6%	38.9%	31.3%	24.0%
In fraternity houses	23.8%	28.0%	15.4%	21.0%	26.2%	32.3%	3.6%	40.0%	33.3%	26.7%	25.6%	27.8%	31.3%	24.0%
In sororities	27.1%	32.0%	15.4%	21.0%	35.7%	32.3%	3.6%	40.0%	33.3%	40.0%	27.9%	27.8%	37.5%	32.0%
In the student union	42.0%	36.0%	48.1%	43.5%	47.6%	38.7%	28.6%	40.0%	53.3%	46.7%	41.9%	44.4%	56.3%	44.0%
In campus dining areas	57.5%	50.0%	67.3%	58.1%	61.9%	48.4%	50.0%	80.0%	73.3%	46.7%	55.8%	55.6%	68.8%	48.0%
At athletic events	66.9%	68.0%	73.1%	69.4%	69.0%	54.8%	75.0%	73.3%	80.0%	60.0%	65.1%	61.1%	68.8%	60.0%
Per cent of institutions where alcoholic beverages are sold on campus:														
3.2 beer	9.4%	8.0%	11.5%	6.5%	14.3%	3.2%	7.1%	0.0%	6.7%	0.0%	14.0%	11.1%	6.3%	20.0%
Any beer	25.4%	32.0%	25.0%	19.4%	26.2%	12.9%	57.1%	40.0%	33.3%	20.0%	16.3%	5.6%	6.3%	20.0%
Wine	24.9%	30.0%	17.3%	12.9%	31.0%	19.4%	53.6%	53.3%	20.0%	20.0%	11.6%	11.1%	6.3%	24.0%
Cocktails	10.5%	20.0%	5.8%	4.8%	11.9%	3.2%	25.0%	20.0%	6.7%	0.0%	9.3%	11.1%	6.3%	4.0%
None	64.6%	62.0%	65.4%	72.6%	57.1%	77.4%	42.9%	46.7%	60.0%	80.0%	59.8%	77.8%	87.5%	60.0%

Note: Survey data are perceptions reported by deans of student affairs at 181 institutions in a stratified random sample.

* Occasional to frequent drinking resulting in intoxication

** Drinking in social settings and usually in moderation, as a secondary reason rather than main reason for the occasion.

*** Infrequent drinking that may include such first-time experiences as patronizing a bar, drinking to the point of intoxication, getting sick, or having a hangover.

† Nine institutions, representing 14.5 per cent of the church-related colleges in the sample, said they prohibit drinking everywhere but also said they permit it in university housing.

SOURCE: SURVEY CONDUCTED FOR THE CHRONICLE BY JOHN MINTER ASSOCIATES

in alcohol programs, according to Ms. Engs and others.

Even fraternities and sororities, viewed in the popular imagination as bastions of chugalugging contests and hazing incidents, are getting into the act. Kappa Sigma, for example, now requires all of its chapters to include an alcohol-education unit in pledge training. Sigma Alpha Epsilon held a three-day clinic for members of sororities and fraternities interested in starting their own abuse-prevention programs. Alpha Tau Omega encourages its members to sponsor BACCHUS chapters on their campuses and this year offered a $500 prize to the member or alumnus who came up with the best poster on responsible alcohol use.

Attitudes 'Too Ingrained'

In addition, some national fraternities say they will discipline, and even suspend the charters of, chapters whose members flagrantly abuse alcohol. "If I had one single thing I could flash my magic wand and solve, it would be the alcohol-abuse problem on our campuses," says Stephen R. Siders, executive director of Alpha Tau Omega.

But leaders in the field of alcohol education are now beginning to recognize that education and treatment alone are not enough. "A lot of students know more about alcohol after taking an alcohol-education course, but they may not have changed their behavior," says one, who asked not to be identified. "That's because attitudes are too ingrained."

What is needed, many experts say, is a set of official policies on alcohol use that pertain to everyone on the campus and that everyone has had a hand in drafting. "When policy is set and sanctioned by the president's office, it comes with a significance, an import," says Gail G. Milgram, associate professor in the Center of Alcohol Studies at Rutgers University. "[It says] that the university administration knows this is an area of concern, and we have chosen to deal with it, and the manner in which we've chosen to deal with it is as follows."

'Community Task Forces'

When students, faculty members, and administrators have participated in the formulation of those policies, they then have a stake in the result and are more likely to comply, many experts say.

"On those campuses I've visited where change takes place, typically there is a large amount of community involvement," says Kenneth C. Mills, asssociate professor in the Center for Alcohol Studies at the University of North Carolina at Chapel Hill. "The more progressive colleges are putting together community task forces. Their goal is to draft a policy so that whatever procedures they decide are appropriate are [the result of] community consensus."

"Don't tell them what they're going to do," Mr. Mills says. "Ask them, 'Now you're aware what's going on in the community, what the problems are. What are you going to do about it?' "

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News Summary

Articles on inside pages

Freshman applications to private colleges and universities are 2 per cent below last year's level; applications to public institutions are 1 per cent less than the number received a year ago. Chronicle Survey on Page 8.

Laboratory mice shipped from a Massachusetts supplier last year are not genetically identical, and research involving them may have to be re-evaluated. Story on Page 3.

A company hired to raise money for biotechnological research at the University of Minnesota will get patent rights to any inventions that result. Story on Page 8.

A summer program at Williams College for middle-level business executives is feeling the effects of cuts in corporate education and training budgets. Story on Page 6.

The Flying High Circus of Florida State University is one of the few circuses left that still perform under the big top. Story on Page 5.

Delinquent repayments on federal loans to 79 colleges and universities amount to more than $30-million. Story on Page 9.

Extra money for student loans will be provided in a supplemental appropriations bill signed by President Reagan last week. Story on Page 9.

Scholarly editions of literary classics provide the foundation for a series of works of American authors geared to a popular audience. Story on Page 15.

Students at Bir Zeit University, which has been shut down for three months by Israeli authorities, have been arrested for trying to hold classes off campus. Story on Page 13.

Soviet scientists are expressing concern that salaries at universities in the U.S.S.R. are not high enough to attract the most able people. Story on Page 13.

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American University of Beirut Caught Up in War in Lebanon

Gunmen kidnap acting president; emergency treatment of wounded causes financial loss

By MALCOLM G. SCULLY

The American University of Beirut, which has managed to avoid involvement in the ideological and religious battles that have plagued Lebanon in recent years, is caught up in the latest conflict there and now faces financial and physical threats to its existence:

▶ As a result of the Israeli invasion of Lebanon, the university has been losing $1.7-million a month and must raise at least $4-million to meet its payroll in September.

▶ The university's acting president, David S. Dodge, was kidnaped last week by unidentified gunmen on the university's campus in the besieged western section of the Lebanese capital. Observers say the kidnaping could complicate efforts to achieve a peaceful settlement to the strife in Lebanon.

▶ A.U.B. officials say that should the Israelis decide to attack West Beirut to drive out the Palestine Liberation Organization, the university's hospital and campus probably would be at the center of the fighting.

Most of the university's financial losses have been incurred at its 420-bed hospital, which has been treating patients injured during the Israeli invasion, Malcolm H. Kerr, the university's new president, said in Washington last week.

AMERICAN UNIVERSITY OF BEIRUT

In June, the American University of Beirut's hospital treated some 1,110 war casualties. Above, a photograph taken from a videotape shows doctors at the hospital operating on a wounded man earlier this month.

'On a War Footing'

During June, the hospital treated more than 1,100 casualties of the fighting in Beirut, virtually none of whom could pay for their treatment.

"Since the start of the current fighting, the A.U.B. hospital has been on a war footing," Mr. Kerr said. "To make itself available to war casualties, the hospital had to cancel much of the normal occupancy of its beds from which revenue is ordinarily derived."

In addition, he said, the university has lost almost $900,000 in income because it was forced to cancel its summer-school program.

Mr. Dodge was abducted by at least two men who struck him on the back of the head and forced him into an automobile, Radwan Mawlawi, the university's director of information, told reporters in Beirut. The kidnaping took place between Mr. Dodge's office and his home, both of which are on the university's 73-acre campus.

According to speculation in Beirut, Mr. Dodge's abductors may have been members of Amal, a paramilitary organization of Shiite Moslems that supports the Islamic revolution in Iran. The Shiite sect is the largest single religious group in Lebanon, but it has had little political power or social status.

Some observers suggested that the Shiite group kidnaped Mr. Dodge to hold him as a hostage until the release of an Iranian diplomat who was kidnaped July 4 in East Beirut, a predominantly Christian section of the city.

A spokesman for the Palestine Liberation Organization in Beirut said that Yasir Arafat, the organization's chairman, had ordered its security agents "to drop everything else and concentrate on finding Mr. Dodge safely and quickly."

Could Delay Peace Talks

Mr. Arafat was said to believe that the kidnaping could delay discussions designed to bring an end to the Israeli invasion of Lebanon.

A.U.B. is located in the western, Moslem section of Beirut, and most of its students are Moslems. Many are supporters of the P.L.O.

Mr. Dodge, who was born in Beirut, is

Continued on Page 14, Column 1

Reagan 'Politicizing' Education Panels, Critics Charge

By CHERYL M. FIELDS

WASHINGTON

Within 36 hours of being sworn in last week, the new members of the National Advisory Council on Women's Educational Programs changed the panel's rules, fired its executive director, and chose a new one from among candidates referred by the White House.

Critics charged that the actions were the latest in the Reagan Administration's campaign to "politicize" the supposedly independent councils that advise the Education Department on various issues.

The new executive director of the women's advisory council, Rosemary Thomson, has been a Republican Party campaign worker, has written books on the International Women's Year and the White House Conference on the Family, and since 1975 has been state director in Illinois of the Eagle Forum, an organization founded by the conservative activist Phyllis Schlafly during her campaign against the Equal Rights Amendment.

About an hour after they were sworn in last week, members of the women's advisory council voted to amend its procedures so that its executive director, Joy R. Simonson, could be fired by a majority vote of the members. The original rules called for a written notice and provided an opportunity to appeal. The members, who were appointed by President Reagan in April, then voted 13 to 4 to oust her.

Ms. Simonson said that no "cause" for the firing had been given. "One member said that she couldn't understand how the council could act when the members had never met me," said Ms. Simonson, "but another said she felt that she was familiar

Continued on Page 11, Column 1

CHRONICLE SURVEY

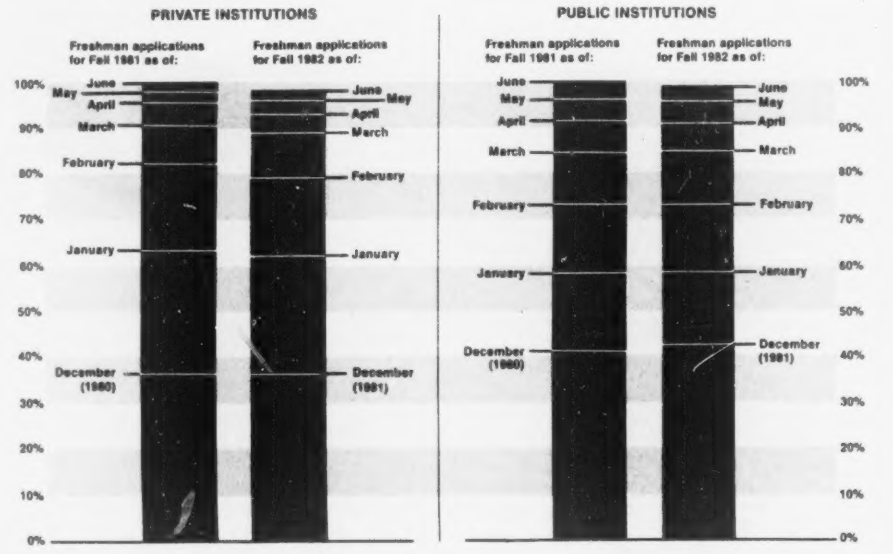
Applications for Fall Admission Decline at Private and Public Colleges

Applications for admission to this fall's freshman classes at private colleges and universities were down by about 2 per cent through the end of June, compared with the number of applications a year earlier. At public colleges and universities, applications were down by 1 per cent compared with a year ago.

The number of deposits paid by freshman applicants, which indicates more serious intent to enroll, declined more sharply than applications: down 6.3 per cent at private institutions and 3.2 per cent at public institutions.

Those estimates are based on reports from 292 four-year institutions in a national survey conducted for *The Chronicle* by John Minter Associates, a research organization in Boulder, Colo.

A similar survey last year found freshman applications for admission to public and private four-year institutions in the fall of 1981 were up 6.5 per cent over the previous year. The actual enrollment of first-time freshmen last fall, however, was down by just under 1 per cent from the previous fall's total, according to the National Center for Education Statistics.



Note: All percentages are of the total in June, 1981

CHRONICLE CHART BY PETER H. STAFFORD

Changes in Number of Freshman Applicants

June 30, 1982, compared with June 30, 1981

	Change in average *	Per cent reporting increase	Per cent reporting decrease	Change		
				Low **	Median †	High ‡
Private colleges and universities						
Research and Ph.D.-granting	− 0.1%	52.4%	47.6	− 5.4%	− 0.2%	+ 4.1%
Comprehensive	− 2.1%	38.3%	60.0%	− 7.3%	− 3.8%	+ 3.0%
Liberal arts	− 2.0%	39.4%	60.6%	−14.4%	− 3.4%	+ 7.4%
Regions						
Northeast and Mid-Atlantic	− 1.4%	45.2%	54.8%	− 9.3%	− 3.4%	+ 4.1%
Great Lakes and Plains	− 0.3%	37.9%	60.6%	−10.3%	− 3.6%	+ 6.0%
Southeast	− 0.8%	29.0%	71.0%	−14.4%	− 4.3%	+ 1.5%
West and Southwest	− 2.6%	50.0%	50.0%	−12.4%	− 0.8%	+ 6.8%
Enrollment						
500 – 999	− 5.1%	33.3%	66.7%	−21.7%	− 5.5%	+ 4.0%
1,000 – 2,499	− 1.8%	42.5%	57.5%	−10.6%	− 2.4%	+ 6.8%
2,500 – 4,999	+ 1.3%	46.4%	50.0%	− 6.7%	− 2.9%	+ 6.1%
5,000 – 9,999	− 2.0%	40.0%	60.0%	− 8.6%	− 1.5%	+ 1.8%
10,000 and over	− 0.8%	40.0%	60.0%	− 5.4%	− 3.8%	+ 2.5%
All private institutions	**− 1.9%**	**40.2%**	**59.6%**	**− 9.9%**	**− 2.3%**	**+ 5.2%**
Public colleges and universities						
Research and Ph.D.-granting	+ 1.8%	64.2%	35.8%	− 6.5%	+ 2.2%	+ 7.7%
Comprehensive	− 1.9%	53.4%	46.6%	− 8.3%	+ 0.2%	+ 8.7%
Regions						
Northeast and Mid-Atlantic	+ 3.8%	76.2%	23.8%	− 0.3%	+ 3.2%	+ 6.4%
Great Lakes and Plains	+ 0.6%	55.3%	44.7%	− 9.3%	+ 0.2%	+ 8.0%
Southeast	− 1.3%	50.0%	50.0%	− 6.8%	− 1.2%	+ 7.2%
West and Southwest	− 1.3%	59.1%	40.9%	−13.8%	+ 4.7%	+10.4%
Enrollment						
500 – 2,499	− 1.9%	70.0%	30.0%	− 5.7%	+ 2.9%	+11.4%
2,500 – 4,999	+ 2.8%	57.1%	42.9%	− 5.3%	+ 0.2%	+21.5%
5,000 – 9,999	− 1.8%	47.8%	52.2%	−11.8%	− 4.2%	+ 5.3%
10,000 – 19,999	− 3.4%	50.0%	50.0%	− 9.0%	− 2.5%	+ 5.4%
20,000 and over	+ 3.0%	69.4%	30.6%	− 5.2%	+ 3.1%	+ 8.0%
All public institutions	**− 1.0%**	**56.1%**	**43.9%**	**− 6.9%**	**+ 1.8%**	**+ 8.1%**
All institutions	**− 1.6%**	**45.7%**	**54.1%**	**− 8.8%**	**− 0.9%**	**+ 6.8%**

* Percentage change in mean number of applications by June 30, 1982, compared with the mean for a year earlier.
** The bottom one-fourth of the institutions reported smaller increases or larger decreases than the percentages shown.
† Half of the institutions reported smaller increases or larger decreases than the percentages shown.
‡ The top one-fourth of the institutions reported larger increases than the percentages shown.
Note: Survey data are from a stratified random sample of 292 four-year colleges and universities, excluding those with enrollment under 500.

SOURCE: SURVEY FOR THE CHRONICLE BY JOHN MINTER ASSOCIATES
P.O. BOX 107, BOULDER, COLO. 80306

Agent for U. of Minnesota to Raise Research Funds; Will Get Patent Rights

By AUSTIN WEHRWEIN

MINNEAPOLIS

The University of Minnesota has signed a contract with a company that plans to raise money from industry for biotechnological research at the university. In exchange, the company will get patent rights to inventions resulting from that research.

The eight-year contract with Genetics International, based in Boston, provides the university with stock in the company and gives four faculty members options to buy company stock.

The company was established by three 1981 graduates of Harvard University's business school while they were still at the university.

"We are an intellectual brokerage house," explained Ron Zwanziger, Genetics International's president. Mr. Zwanziger, an Englishman, holds an engineering degree from London University's Imperial College of Science and Technology as well as an M.B.A. from Harvard.

Part of a Trend

The agreement is part of a trend toward closer ties between private industry and university laboratories. At least 50 major universities have patent-marketing programs, some conducted entirely on the campus and others handled by such companies as Research Corporation of New York and University Patents Inc. of Norwalk, Conn.

Under the arrangement with Genetics International, the University of Minnesota will get 80 shares, or about 4 per cent, of the company's stock.

In addition, four scientists at the university's Gray Freshwater Biological Institute have options to buy 16 shares each at a cost of about $4,000 per 16-share lot.

Mr. Zwanziger said that about 10 investors, whom he declined to identify, had bought into the company. He said that because the company is privately held, he would not disclose how much had been invested, but language in the contract with the university indicates that the goal is to raise $5-million by 1984.

Just how much the contract, which either side is free to cancel, will eventually profit the university or the participating faculty members is unclear, because under the contract the stock can't be sold to the public until 1990.

For the present, according to Kenneth H. Keller, vice-president for university affairs, what matters to the university is not the equity but the prospect for increased support for research.

Mr. Keller, who was instrumental in negotiating the contract, said, "We are giving Genetics International the right of first refusal in the area of biotechnology."

He said that the university, not the company, would have control over choosing the institute's research projects and that the institute would "be free to talk to anyone else" about possible support for its research.

"That leaves us in the driver's seat," he added.

Genetics International will function as an agent, relieving the university of the chore of soliciting financing. The company would also handle any reassignment of the patents to the providers of the funds.

Some of the university's regents have questioned whether the contract could create conflicts of interest and lead researchers with stock in the company to favor company-financed projects.

Mr. Keller said that was less likely under the contract than it would be if the university did its own patent marketing.

He said that no more than 25 per cent of the research at the institute could be financed through the Boston company and that an outside peer-review panel would monitor the research at the institute to guard against potential conflicts of interest.

Suspect in College-Library Thefts Pleads Guilty to Federal Charge

PHILADELPHIA

James R. Shinn, whose arrest last December near Muhlenberg College led to the discovery of a cache of rare and valuable library books, pleaded guilty in federal court here last week to charges of possessing and transporting books stolen from a number of colleges and universities.

Mr. Shinn, who faces several other state and federal charges, is to be sentenced next month, according to William Moffett, the librarian at Oberlin College. Mr. Shinn was initially apprehended at Oberlin last year, but jumped bail.

Publicity about his case, however, helped Muhlenberg librarians spot him in December. He was arrested near the campus in Allentown, Pa., and police found several hundred rare books in his motel room. Identifying marks had been removed from many of them, Mr. Moffett said, so they could be sold to book dealers.

Mr. Shinn is thought to have worked by scanning library catalogues for valuable books—often of little scholarly use but of great interest to collectors—that could be found in open stacks.

Besides Muhlenberg and Oberlin, Mr. Moffett said, Mr. Shinn is suspected of stealing books from the New York Public Library and from more than two dozen college libraries. They include Bryn Mawr College, Carnegie-Mellon University, Case Western Reserve University, Concordia Seminary in Missouri, Iowa State University, Johns Hopkins University, Lehigh University, Northwestern University, Oregon State University, Princeton University, Reed College, Stanford University, the University of California at Los Angeles and at Santa Barbara, Washington University in St. Louis, and the Universities of Arizona, Cincinnati, Illinois, Michigan, Oklahoma, Oregon, Pennsylvania, Washington, West Virginia, and Wisconsin.

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News

Eisenhower College, the "living memorial" to President Eisenhower, has been shut down because of severe financial problems. Story on Page 9.

A $2-million deficit will force the Massachusetts Institute of Technology to eliminate as many as 400 non-teaching positions and cut its administrative budget over the next three years. Story on Page 9.

State officials at the annual meeting of the National Association of College and University Business Officers predicted a worsening of economic conditions throughout the rest of the decade. Story on Page 9.

The first satellite directly controlled by university students and researchers is studying the sun's effect on ozone in the upper atmosphere. Story on Page 5.

Americans' ignorance about Canada has led a group of U.S. scholars to lobby for the establishment of Canadian-studies courses at colleges and universities. Story on Page 7.

The Rev. Andrew M. Greeley is the subject of a $3-million libel suit by the managing editor of *Notre Dame Magazine*. Story on Page 3.

Black law students at Harvard University are urging fellow students to boycott a course in racial discrimination because one of the professors is white. Story on Page 3.

The fledgling Mercer University Press has made a large investment in electronic technology and printing equipment that has thus far paid off. Story on Page 19.

Scholarly exchanges between the United States and China are expected to continue next fall despite the recent expulsion of an American teacher from China. Story on Page 17.

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·Year-Old Association for Advancement of Humanities to Close This Month

'Humanists have failed to develop a sense of their collective interest,' chairman charges

By MALCOLM G. SCULLY

WASHINGTON

Faced with declining membership and little prospect for raising further contributions from corporations or foundations, the three-year-old American Association for the Advancement of the Humanities has decided to go out of business.

James M. Banner, Jr., chairman of the association created to provide a national voice for the humanities, sent a letter to its 2,150 members last week announcing that it "will suspend operations at the end of August."

The association, he wrote, "has clearly failed to attract the continuing support from individuals, organizations, foundations, and corporations that is required for its perpetuation. It should therefore make way for other efforts that may be more successful."

In an interview, Mr. Banner said the association's membership had declined from a high of about 3,000 a year ago to the present 2,150. When the organization opened its Washington office in early 1979, he added, it hoped to attract 8,000 to 10,000 members in three years.

While Mr. Banner attributed some of the decline to the state of the national economy, he said he did not believe that was the chief cause of the association's downfall.

Instead, he said, "I fear that the individual humanists have failed to develop a sense of their collective interest, of the problems they face collectively."

He said too many scholars involved in the humanistic disciplines failed to see themselves as humanists, but instead "see themselves as musicologists, or historians, or literary critics."

The association was created, at least in part, to make the case that scholars and teachers in the humanities have a common identity and a common interest in promoting the general health of the humanities at the local, state, and national levels.

Its original prospectus said, "The problems [of the humanities] include:

- "The uncertain levels of public and private support for humanistic scholarship and for the teaching and dissemination of humanistic knowledge.
- "The erosion of the humanities and of the teaching of literacy in the schools.
- "The lack of information available to humanists about the policies of public and private institutions which affect their work.
- "The absence of effective organization among humanists generally."

The prospectus added, "As a result, hu-

Continued on Page 8, Column 1

6 Universities Could Lose Defense Contracts over Law Schools' Bans on Army Recruiters

By CHERYL M. FIELDS

WASHINGTON

The Judge Advocate General of the Army has warned six law schools that their universities could lose their Defense Department contracts if the schools continue to bar Army recruiters because the service refuses to accept homosexuals.

However, none of the six law schools has modified its policies barring recruiters from organizations that discriminate on the basis of sexual preference from using campus facilities to interview students.

The University of California at Los Angeles and Columbia, Harvard, New York, Wayne State, and Yale Universities received letters from Maj. Gen. Hugh J. Clausen in May urging them to make an exception in their policies for recruiters from the Army's Judge Advocate General's Corps.

Lawyers in the corps conduct courts-martial and handle other legal issues for the Army.

Although a spokesman for the Judge Advocate General said no sanctions had yet been applied, General Clausen's letters warned that if the schools failed to allow Army recruiters to use campus facilities to interview graduates, he would bar Army officers and lawyers from taking courses at the schools.

In addition, he wrote, "I am considering recommending that . . . no Defense Department contracts be awarded your university as long as our officers are denied the ability to recruit on campus."

The schools' policies also could jeopardize their universities' Reserve Officers Training Corps programs, he said.

The possible recommendation of a cut-off of Defense Department contracts would be by far the most serious sanction, spokesmen for the schools said, because relatively few Army officers are trained at the schools and a number of the universities have no R.O.T.C. units.

But while they said they would be willing to discuss the issue with Army officials, spokesmen for the schools said they anticipated no changes in the policies. Several said the schools had adopted the policies as a matter of "principle," believing that sexual preference "is not job-related."

Lance Liebman, associate dean of Har-

Continued on Page 6, Column 1

Tuition Rates Up 20 Pct. at Public Institutions

NEW YORK

Increases in tuition rates this fall will average 20 per cent at public colleges and universities and 13 per cent at private institutions, the College Scholarship Service estimated last week.

Tuition and fees charged by public four-year institutions for the coming academic year will average $979, compared with $815 in 1981-82, according to the organization's annual survey of college costs.

At private four-year colleges and universities, next year's average will be $4,021, compared with $3,552 in 1981-82.

For public two-year colleges, the average tuition rate for 1982-83 is estimated at $595, up nearly 18 per cent from an average of $505.

At private two-year colleges, the estimated average is $2,486, up 11 per cent from an average of $2,238.

Generally, only tuition increases announced before June 1 were included in the survey. In some states, public colleges and universities had not set their tuition rates by that date because of late decisions by legislatures or because of other budget uncertainties. Hence the actual averages may be higher than the College Scholarship Service has estimated.

The scholarship service, the financial-aid division of the College Board, based its estimates on data from approximately 910 private four-year institutions, 260 public four-year institutions, 480 public two-year institutions, and 190 private two-year institutions, all of which reported their tuition and fees for both of the past two years.

Tuition and fees charged by more than 3,300 postsecondary institutions are listed on Pages 12 through 16.

FACT-FILE

Finances of Community Colleges in 1980-81

	Enrollment under 5,000		Enrollment 5,000 to 15,000		Enrollment over 15,000		All institutions, 1979-80		All institutions, 1980-81	
Expenditures	Median per student*	Per cent of total	Median per student*	Per cent of total	Median per student*	Per cent of total	Median per student*	Per cent of total	Median per student*	Per cent of total
Total educational and general	$2,861	100.0%	$2,705	100.0%	$2,650	100.0%	$2,676	100.0%	$2,739	100.0%
Academic	1,708	59.7%	1,608	60.8%	1,625	63.0%	1,623	61.7%	1,635	61.2%
Instruction and research	1,437	49.6%	1,350	51.4%	1,334	51.2%	1,342	50.9%	1,366	50.9%
For credit instruction*	1,354	47.1%	1,281	48.5%	1,231	47.4%	1,231	47.5%	1,305	48.0%
For noncredit instruction**	—	0.9%	—	1.7%	—	2.9%	—	1.6%	—	1.4%
Public service	0	0.0%	4	0.2%	10	0.4%	4	0.2%	4	0.1%
Academic support	232	8.4%	193	7.6%	228	8.4%	232	8.5%	215	8.2%
Support services	1,100	37.9%	1,008	37.4%	923	35.3%	954	36.3%	1,013	36.9%
Student services	256	8.7%	231	8.4%	232	8.7%	224	8.4%	237	8.6%
Institutional support	448	15.7%	392	15.3%	382	14.4%	385	14.9%	404	15.1%
Plant operation and maintenance	369	12.5%	324	12.2%	311	11.4%	309	11.7%	332	12.0%
Utilities	118	3.9%	104	3.7%	95	3.5%	98	3.5%	106	3.7%
Other	242	8.3%	220	8.4%	199	7.5%	210	7.7%	217	8.1%
Scholarships and fellowships	44	1.6%	29	1.1%	30	1.0%	31	1.2%	36	1.3%
Revenues										
Total revenues (current fund, excluding auxiliaries)	$3,019	100.0%	$2,800	100.0%	$2,695	100.0%	$2,851	100.0%	$2,878	100.0%
Tuition and fees	446	14.9%	512	18.2%	520	17.7%	440	15.1%	475	16.7%
For credit instruction*	431	14.3%	479	17.0%	481	15.8%	403	14.2%	447	15.7%
For noncredit instruction**	—	0.2%	—	0.7%	—	0.9%	—	0.4%	—	0.5%
Appropriations	2,134	69.7%	1,852	67.8%	1,894	68.0%	1,943	71.2%	1,961	68.6%
Federal	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
State	1,685	56.0%	1,365	51.5%	1,478	53.9%	1,566	58.1%	1,495	53.7%
Local	216	7.1%	414	13.6%	407	17.1%	290	9.9%	352	12.8%
State and local combined	2,075	68.6%	1,824	66.7%	1,864	67.5%	1,902	69.7%	1,928	67.9%
Gifts, grants, and contracts	268	8.1%	187	7.2%	243	8.7%	190	8.0%	225	8.0%
Federal	120	4.3%	121	4.2%	147	5.6%	128	4.8%	127	4.7%
State and local	26	1.0%	33	1.3%	41	1.4%	29	1.1%	33	1.2%
Private	1	0.0%	2	0.1%	2	0.1%	1	0.0%	1	0.1%
Other revenues (excluding auxiliaries)	91	2.9%	94	[illegible]	97	3.7%	78	2.7%	92	3.4%

— Data not available.
* Based on number of full-time-equivalent students enrolled for credit.
** Based on full-time-equivalent students enrolled in noncredit courses.

SOURCE: NATIONAL ASSOCIATION OF COLLEGE AND UNIVERSITY BUSINESS OFFICERS

Association for Advancement of Humanities to Close This Month

Continued from Page 1

manities scholars and teachers are perceived to be uninterested in relating their expertise and experience to matters of broad public concern. Their work is often dismissed as peripheral to important public questions and is considered luxurious elitism rather than an essential resource for the society."

In the interview last week, Mr. Banner said he still believed that an effort to organize humanists collectively was necessary. However, he said the association could not afford the time and money required to convince humanists themselves of that.

John W. Shumaker, a member of the board of directors and one of the founders of the association, said last month that the idea simply had not caught on quickly enough for the association to survive.

Mr. Shumaker, a classicist who is dean of the college of humanities and fine arts at the the State University of New York at Albany, said he still believed "something has to be done to solidify the national identity of the humanities as 'the humanities,' rather than as the individual disciplines."

But, he added, the association has not persuaded enough humanists "to devote their precious resources to it."

In his letter to members announcing the association's demise, Mr. Banner said, "Occasionally, an organization that cannot meet or sustain its founding aims should set an example by forthrightly and deliberately going out of existence. The world is full of institutions that have outlived their time." However, he said, "the A.A.A.H. is not one of them."

The association, he added, has "sought to undertake activities in the humanities never before attempted. That they cannot be sustained does not mean that the association's objectives were wrong or unworthy of support."

Since planning for the organization began in 1977, it has received about $500,000 in grants from private foundations, Mr. Banner said.

While the association never reached its goal of 8,000 to 10,000 members, those it did attract represented a wide range of fields in the humanities, he said. They included college and university faculty members, librarians, schoolteachers, and staff members of museums and federal agencies such as the National Endowment for the Humanities.

While the organization is ceasing operations, Mr. Banner said, the board of directors has decided to "keep it alive as a corporation and continue to evaluate ways in which its aims may be pursued by different means."

He said that, at the least, he hoped to find some way to resume publication of the association's monthly journal, *Humanities Report*. Publication halted with the June issue.

College and University Personnel Association

**COST CONTAINMENT:
ADVANCED FRINGE BENEFIT TECHNIQUES
(Incentive Early Retirement)**

September 1-3, 1982 in Washington, D.C.

PURPOSE: This seminar will aid participants in designing fringe benefit plans that best meet their institutions' specific goals and resources.

PROGRAM:

- Incentive Early Retirement Programs
- 403(b) Annuity Calculation Workshop
- Concurrent Sessions:
  Special Aspects of 403(b) Calculations for Public Institutions OR Dental Plan Design
- Alternative Funding Methods for Group Insurance
- Bidding Insurance Contracts
- Flexible Benefits
- Benefit Implications of Economic Recovery Act
- Health Care Cost Containment
- Special Interest Group Discussions

FEES: Registration fees are $225 for CUPA members, and $275 for nonmembers. Additional members from the same institution may attend for $175 each for CUPA members and $225 each for nonmembers. For information on accommodations and registration, contact CUPA headquarters **by August 20.** Call (202) 462-1038 or write to CUPA, 11 Dupont Circle, Suite 120, Washington, D.C. 20036.

Canadian Studies at U.S. Colleges

Continued from Preceding Page

afford to get him to South Africa" or some other more distant country.

"We see Canada as a very interesting place for students who are interested in comparative studies generally," adds H. Bradford Westerfield, director of Canadian studies at Yale. "They can no longer afford to go to Asia or Europe, grants being what they are."

Mr. Westerfield and other Canadianists attribute the lack of attention to Canada to what he calls "the noncontroversiality of Canadian-American relations until very recently."

Interest began to rise when Canada started having such problems as the separatist movement in Quebec, and when it began to stress that it wanted to maintain its political, economic, and cultural independence from the United States.

"René Lévesque [Quebec's separatist premier] may have been a great help to Canadian studies," says Mr. Winks.

Americans are "pretty crisis-oriented," adds Mr. Metcalfe of the University of Vermont. "We can probably expect an increase in the number of people who study El Salvador."

He says, "Our relationship with Canada is a long-term one of mutual dependence, and it's not going to go quite so smoothly as it has in the past," so there may be some added incentive for new courses on Canada.

He also cites the "impact of Canadian literature," including the popularity in the United States of such writers as Robertson Davies and Margaret Atwood and the development of French Canadian writers during the "cultural renaissance" that began in Quebec in the 1960's.

Despite the progress that has been made, most Canadianists agree that American awareness of Canada—both at colleges and universities and in general—still is changing slowly at best.

The progress at universities thus far has been "relatively quiet and somewhat modest," says Yale's Mr. Winks. "In terms of creating a larger public awareness outside the university, we have been far less successful."

Tuition and Student Fees for 1981-82 and 1982-83

Following are the tuition and fees charged at more than 3,300 colleges, universities, and other postsecondary institutions for the 1981-82 and 1982-83 academic years, including additional tuition that many institutions charge to out-of-state students.

The figures were compiled by the College Scholarship Service, the financial-aid division of the College Board.

A blank space indicates that an institution will have no such charge. An asterisk (*) indicates that current figures are not available. Institutions that did not report tuition and fees for 1982-83 have been omitted.

Copies of the College Scholarship Service's complete report, *The College Cost Book, 1982-83*, can be ordered, at $9.95 each, from College Board Publications, Dept. E-26, Box 886, New York, New York 10 01.

ALABAMA

	1981-82 Tuition and fees	1982-83 Tuition and fees	1982-83 Added out-of-state tuition
Alabama Christian C	2,000	2,200	
Alabama St U	525	600	600
Athens St C	*	900	900
Atmore St Tech C	305	380	
Carver St Tech C	410	510	
Gadsden St Tech Inst	*	100	
Huntingdon C	2,550	2,700	
Jacksonville St U	600	700	350
Judson C	2,190	2,330	
Marion Milit Inst	3,450	3,527	
Miles C	2,300	2,400	
Muscle Shoals St Tech C	*	500	
Oakwood C	*	3,753	
Opelika St Tech C	400	500	400
Samford U	2,834	3,090	96
Southeastern Bib C	*	2,560	
Spring Hill C	*	4,500	
Stillman C	*	2,180	
Talladega C	*	2,967	
Tuskegee Inst	*	2,750	
U of Montevallo	*	918	600
U of North Alabama	750	870	870
Walker C	1,049	1,126	

ALASKA

	1981-82 Tuition and fees	1982-83 Tuition and fees	1982-83 Added out-of-state tuition
Alaska Bible C	1,030	1,202	
Alaska Pacific U	2,500	3,000	
Sheldon Jackson C	2,650	3,160	

ARIZONA

	1981-82 Tuition and fees	1982-83 Tuition and fees	1982-83 Added out-of-state tuition
Arizona Automotive Inst	3,950	4,350	
Arizona C of Bible	*	1,870	
Arizona St U	650	710	2,540
Arizona Western C	310	390	2,034
Biosystems Inst	*	3,465	
C of Ganado	740	1,452	
Eastern Ariz C	*	300	2,300
Embry-Riddle Aero U Prescott	2,630	2,930	
Grand Canyon C	2,294	2,483	
Maricopa Tech CC	*	264	2,036
Mohave CC	120	206	2,040
Northern Arizona U	650	710	2,040
Northland Pioneer C	*	100	1,500
Pima CC	308	308	1,920
Prescott C	3,200	3,575	
Rio Salado CC	*	264	2,036
Scottsdale CC	172	172	1,950
South Mountain CC	*	264	2,036
S'western Bapt Bible C	1,984	2,126	
U of Arizona	650	710	2,540
U of Phoenix	*	3,500	
Western Internat'l U	*	1,500	
Yavapai C	310	430	2,240

ARKANSAS

	1981-82 Tuition and fees	1982-83 Tuition and fees	1982-83 Added out-of-state tuition
Arkansas Bapt C	*	1,350	
Arkansas C	2,950	3,300	
Ark Continental Bty Sch	*	940	
Arkansas St U	660	730	550
Beebe Branch	440	568	212
Arkansas Tech U	720	750	700
Capital City Bus C	*	2,690	
C of the Ozarks	1,120	1,300	
Crowley's Ridge C	*	1,590	
Delta Voc-Tech Sch	*	120	
East Arkansas CC	400	432	384
Foothills Voc-Tech Sch	*	120	
Garland Co CC	360	432	408
Harding U	2,460	2,831	
Henderson St U	640	720	720
Hendrix C	2,700	3,275	
John Brown U	2,300	2,500	
Miss Co CC	360	432	384
North Arkansas CC	*	432	384
Phillips Co CC	350	432	384
Southern Ark U	690	720	390
El Dorado Branch	504	504	204
Technical Branch	*	552	276
Southern Baptist C	*	2,094	

ARKANSAS—Continued

	1981-82 Tuition and fees	1982-83 Tuition and fees	1982-83 Added out-of-state tuition
U of Arkansas	720	780	1,140
Little Rock	600	800	1,140
Monticello	600	768	910
Pine Bluff	*	710	1,140
Westark CC	410	468	648

CALIFORNIA

	1981-82 Tuition and fees	1982-83 Tuition and fees	1982-83 Added out-of-state tuition
Academy Internat'l Santa Barbara	*	2,960	
Academy Pacific San Bernardino	*	4,440	
Ambassador C	1,403	1,553	
American Acad Dramatic Arts West	2,475	2,975	
American Conservatory Theatre	*	3,300	
Andon C	2,950	3,385	
Armstrong C	*	2,178	
Art Center C of Design	3,580	3,940	
Azusa Pacific U	3,632	4,380	
Bauder C	*	3,775	
Bethany Bible C	2,481	2,722	
Biola U	3,544	4,082	
Brooks C	3,580	3,780	
Brooks Inst	*	3,100	
Cal Baptist C	2,862	3,022	
Cal C of Arts & Crafts	4,260	4,810	
Cal Inst of Arts	5,003	5,600	
Cal Inst of Tech	5,269	7,575	
California Lutheran C	4,000	4,510	
Cal Maritime Academy	972	1,192	1,620
Cal Polytech St U San Luis Obispo	277	435	3,150
California St C			
Bakersfield	213	387	3,150
San Bernardino	241	407	3,150
Stanislaus	245	412	3,150
California St Poly U Pomona	254	409	3,150
California St U			
Chico	250	437	3,150
Dominguez Hills	258	407	3,150
Fresno	272	425	3,150
Fullerton	265	423	3,150
Hayward	245	407	3,150
Long Beach	250	432	3,150
Los Angeles	240	417	3,150
Northridge	265	427	3,150
Sacramento	245	407	3,150
Chapman C	4,970	5,570	
Christ C Irvine	2,790	3,120	
Christ Heritage C	2,750	3,000	
Chula Vista Beauty C	*	2,750	
Claremont McKenna C	6,400	7,250	
Coastline CC			2,190
Cogswell C	2,700	3,200	
C of the Ctr for Erly Ed	1,700	2,100	
C of Notre Dame	3,700	4,700	
C of the Redwoods			2,160
C of the Siskiyous	30	30	2,250
Commercial Diving Ctr	4,100	4,700	
Criss C of Business Anaheim	2,695	3,295	
Cuyamaca C	36	36	2,160
Cypress C	10	10	2,280
DeLoux Sch, Cosmet	2,325	2,592	
Dick Grove Sch, Music	*	3,500	
Dominican C, San Rafael	3,950	4,510	
Don Bosco Tech Inst	1,650	1,850	
Don's Beauty Sch,			
Oakland	*	1,650	
San Mateo	1,650	1,650	
D-Q University	2,540	3,030	
Fashion Inst of Design & Merch	*	4,100	
Federico's C, Hairstyling			
Lake Tahoe	2,800	2,900	
Southgate	2,700	2,900	
Fresno Pacific C	3,600	3,890	
Ganaye Academy of Cosmetology	*	1,995	
Gino Robair Beauty C	*	1,900	
Golden Gate U	2,310	2,610	
Harvey Mudd C	6,380	7,560	
Holy Names C	3,870	4,570	
Humboldt St U	264	435	3,150
International College	*	4,000	
La Puente Vly Voc Ctr	70	70	
Lassen C	20	30	2,250
Life Bible C	1,300	1,980	
Lincoln U	2,770	2,535	
Loma Linda U	4,725	5,230	
Los Angeles Baptist C	3,000	3,600	
Los Angeles Co Med Ctr Sch of Nursing	*	1,200	
Louise Salinger Academy of Fashion	*	2,626	
Loyola Marymount U	4,526	5,139	
Marinello Sch of Beauty: Whittier	*	2,596	
Marymt Palos Verdes C	3,365	3,675	
Menlo C	5,350	5,970	
Mills C	5,550	6,450	
Monterey Inst of Internat'l Studies	4,659	4,950	
Mt St Mary's C	4,010	4,560	
MTI Western Bus C Sacramento	1,975	2,200	
National U	2,880	3,060	
New C of Cal	2,700	2,740	
Newberry Sch of Beauty:			
Burbank	*	2,500	
Canoga Park	*	2,500	

CALIFORNIA—Continued

	1981-82 Tuition and fees	1982-83 Tuition and fees	1982-83 Added out-of-state tuition
Covina	*	2,500	
Hollywood	*	2,500	
Northrop U	4,770	4,995	
Occidental C	6,284	6,999	
Otis Art Inst, Parsons Sch of Design	*	4,780	
Oxnard Beauty C	*	2,440	
Pacific Christian C	2,652	2,756	
Pacific Oaks C	3,900	4,820	
Pacific Travel Sch	2,495	2,495	
Pacific Union C	4,725	5,220	
Pepperdine U	6,256	6,688	
Pitzer C	6,560	7,828	
Point Loma C	3,265	3,693	
Pomona C	6,294	7,390	
Practical Schools	3,000	4,000	
Ron Bailie S of Brdcst			
San Francisco	*	4,990	
San Jose	4,500	4,990	
Royal Barber C	*	1,875	
St Luke's Sch of Nursing	2,700	2,700	
St Mary's C of Cal	4,471	5,130	
Salinas Beauty C	*	1,940	
San Diego St U	232	419	3,150
San Fran Art Inst	*	4,820	
San Fran Cons of Music	4,635	5,035	
San Francisco St U	265	426	3,150
San Jose Bible C	*	2,112	
San Jose St U	269	421	3,150
Santa Rosa Beauty C	*	3,350	
Sawyer C			
Pomona	*	3,475	
Ventura	*	2,870	
Scripps C	6,285	7,190	
Sequoia Auto Inst	*	4,100	
Simpson C	2,600	3,050	
Sonoma St U	268	433	3,150
Southern Cal C	2,802	3,096	
S Cal C of Med and Dent Careers	2,895	3,048	
S Cal Inst of Architecture	*	3,730	
Stanford U	7,140	8,220	
Studio Seven Fashion Career C	2,632	4,045	
Transprtn Training Corp	*	3,800	
U S International U	4,545	4,770	
U of California			
Berkeley	806	1,173	3,150
Davis	809	1,185	3,150
Irvine	768	1,141	3,150
Los Angeles	798	1,158	3,150
Riverside	813	1,180	3,150
San Diego	823	1,197	3,150
San Franciso	*	1,255	3,150
Santa Barbara	817	1,194	3,150
Santa Cruz	831	1,261	3,150
U of Judaism	950	3,040	
U of La Verne	4,690	5,158	
U of the Pacific	6,579	7,615	
U of Redlands	5,650	6,750	
U of San Diego	4,400	5,160	
U of San Francisco	4,430	4,980	
U of Santa Clara	4,593	5,190	
U of Southern Cal	6,275	7,160	
U of West Los Angeles	*	2,274	
West Coast Christ C	1,550	1,800	
Western St U C of Law			
Orange Co	3,850	4,396	
San Diego	3,582	4,396	
Westmont C	4,860	5,490	
Whittier C	5,126	5,886	
Woodbury U	3,100	3,819	
World C West	3,150	3,810	
Yeshiva U of L A	*	2,200	

COLORADO

	1981-82 Tuition and fees	1982-83 Tuition and fees	1982-83 Added out-of-state tuition
Bernel Hairstyling C	1,850	2,150	
Beth-El Sch of Nursing, Memorial Hosp	*	2,350	1,200
Colorado C	*	6,400	
Colorado NW CC	520	580	1,210
Colorado Sch of Mines	*	2,280	4,168
Colorado St U	*	951	3,018
Columbine Beauty Sch	*	2,180	
Denver Auto & Diesel C	*	3,650	
Denver Inst of Tech	*	3,354	
Fort Lewis C	*	788	2,238
Intermtn Bible C	1,092	1,212	
Loretto Heights C	4,345	4,945	
Mile Hi C	*	2,925	
Naropa Inst	3,250	3,405	
Nazarene Bible C	1,143	1,143	
Northeastern Jr C	*	423	1,575
Parks C	3,500	3,500	
Presbytn/St Luke's Med Ctr Sch of Nursing	*	4,500	
Regis C	4,460	5,160	
Rockmont C	2,850	3,225	
Rocky Mtn Sch of Art	2,135	2,780	
U of Denver	5,130	6,150	
U of So Colorado	781	974	2,628

CONNECTICUT

	1981-82 Tuition and fees	1982-83 Tuition and fees	1982-83 Added out-of-state tuition
Acad for Bus Careers	2,975	3,400	
Albertus Magnus C	4,050	4,802	
Asnuntuck CC	354	434	920
Briarwood C	2,890	3,190	
Bridgeport Eng Inst	*	1,705	
Central Conn St C	830	951	1,000
Connecticut C	6,850	8,000	
Conn Sch, Electronics	*	3,350	
Creative Hairstyling & Skin Care Sch	*	2,500	

CONNECTICUT—Continued

	1981-82 Tuition and fees	1982-83 Tuition and fees	1982-83 Added out-of-state tuition
Eastern Conn St C	840	992	1,000
Fairfield U	4,450	5,145	
Greater Hartford CC	404	434	920
Greater New Haven St Tech C	377	492	1,038
Hartford C for Women	3,600	4,150	
Hartford State Tech C	*	492	1,038
Henry Abbott Regional V-T Sch	0	0	1,966
Hosp of St Raphael Sch of Rad Tech	500	500	
Housatonic CC	354	434	920
Mattatuck CC	354	434	920
Middlesex CC	354	434	920
Mitchell C	*	5,410	
Mohegan CC	354	434	920
Mt Sinai Hosp Sch of Rad Tech	*	300	
Nat'l Acad, Hairdressing New Britain	*	2,643	
Northwestern Conn CC	354	434	920
Norwalk CC	354	434	920
Norwalk St Tech C	430	492	1,038
Post C	3,300	4,000	
Quinebaug Valley CC	389	434	920
Quinnipiac C	4,500	5,145	
Sacred Heart U	*	3,450	
St Alphonsus C	930	2,900	
St Joseph C	4,020	4,570	
St. Mary's Hosp Sch of Nursing	1,675	1,980	
Sampieri Sch of Hair Des	*	2,350	
Sch of Hartford Ballet	2,400	2,900	
South Central CC	354	434	920
Southern Conn St C	910	883	1,000
Stone School	*	3,330	
Technical Careers Inst	*	3,920	
Thames Vly St Tech C	377	492	1,038
Trinity C	6,580	7,490	
Tunxis CC	404	434	920
U of Bridgeport	5,265	5,943	
U of Connecticut	1,114	1,225	3,080
U of Hartford	5,400	6,400	
U of New Haven	4,170	4,610	
Waterbury St Tech C	506	492	1,038
Wesleyan U	*	8,370	
Western Conn St C	816	931	1,000
Windham Comm Hosp Sch of Rad Tech	*	410	
Yale U	7,150	8,190	

DELAWARE

	1981-82 Tuition and fees	1982-83 Tuition and fees	1982-83 Added out-of-state tuition
Brandywine C of Widener U	3,155	3,600	
Delaware St C	570	650	950
Delaware Tech & CC Stanton/Wilmington	*	601	576
Goldey Beacom C	2,490	2,700	
Wesley C	3,850	5,230	
Wilmington C	*	3,180	
Wilmington Med Ctr Rad Tech	550	660	

DIST. OF COLUMBIA

	1981-82 Tuition and fees	1982-83 Tuition and fees	1982-83 Added out-of-state tuition
American U	5,310	6,270	
Beacon C	*	2,450	
Ben Franklin U	*	2,750	
Catholic U of America	5,050	5,870	
Corcoran Sch of Art	3,250	3,980	
Gallaudet C	1,070	1,275	
George Wash U	4,200	5,100	
Georgetown U	5,750	6,830	
Howard U	1,965	2,515	
Mount Vernon C	4,200	4,800	
Southeastern U	2,250	3,000	
Trinity C	4,785	5,485	
U of DC	*	364	1,250

FLORIDA

	1981-82 Tuition and fees	1982-83 Tuition and fees	1982-83 Added out-of-state tuition
Barry U	*	4,400	
Bauder Fashion C	3,605	4,105	
Bethune-Cookman C	2,878	3,162	
Biscayne C	3,400	3,300	
Brevard CC	420	480	480
Broward CC	480	480	510
Central Fla CC	420	480	570
Chipola Jr C	484	450	540
Clearwater Christian C	1,520	1,715	
C of Boca Raton	3,600	4,400	
Collier Co V-T Ctr	145	170	50
Daytona Beach CC	500	540	540
Eckerd C	4,990	5,595	
Edison CC	480	510	540
Embry-Riddle Aero U	2,630	2,930	
Flagler C	2,450	2,700	
Florida Atlantic U	*	900	1,900
Florida C	*	2,300	
Florida Inst of Tech	3,519	3,985	
Florida International U	745	822	1,890
Florida Jr C Jacksonville	420	480	540
Florida Keys CC	450	480	540
Florida Southern C	3,022	3,360	
Florida St U	735	840	1,190
Fort Lauderdale C	1,620	1,840	
Gulf Coast CC	450	520	400
Hobe Sound Bible C	1,450	1,600	
Indian River CC	360	510	480
International Fine Arts C	5,985	5,985	
Jackson Mem Hosp Sch of Nursing	567	741	144

FLORIDA—Continued

	1981-82 Tuition and fees	1982-83 Tuition and fees	1982-83 Added out-of-state tuition
Jacksonville U	3,470	3,985	
Jones C	*	1,440	
Lake City CC	*	510	540
Lakeland C	2,473	2,736	
Lake-Sumter CC	462	510	540
Manatee Jr C	*	510	630
Miami Christian C	2,430	2,750	
Miami-Dade CC	*	540	615
Morris Jr C of Business	*	1,458	
New C of USF	*	946	1,798
North Florida Jr C	420	420	420
Okaloosa-Walton Jr C	450	480	564
Orlando Barber C	*	1,150	
Orlando C	*	1,320	
Palm Beach Atlantic C	2,000	2,350	
Palm Beach Jr C	480	540	540
Pasco-Hernando CC	480	540	540
Pensacola Jr C	480	510	510
Pinellas Voc-Tech Inst	154	180	50
Prospect Hall C	2,165	3,025	
Ringling Sch of Art and Design	2,600	2,900	
Rollins C	5,230	5,936	
St John Vianney College Seminary	*	1,875	
St Johns River CC	448	480	600
St Leo C	3,300	3,801	
St Petersburg Jr C	480	540	600
Santa Fe CC	450	480	540
Seminole CC	450	540	600
Southeastern C	1,260	1,690	
Stetson U	3,875	4,385	
Tallahassee CC	420	420	450
Tampa C	*	1,800	
United Electronics Inst	2,453	4,200	
U of Central Fla	675	750	1,230
U of Florida	740	750	1,230
U of Miami	5,000	5,896	
U of North Fla	*	840	1,890
U of Sarasota	2,850	2,850	
U of South Fla	*	750	1,230
U of Tampa	4,496	5,036	
U of West Fla	*	840	1,890
Valencia CC	480	540	600
Warner Southern C	2,850	3,350	
Webber C	2,820	3,175	

GEORGIA

	1981-82 Tuition and fees	1982-83 Tuition and fees	1982-83 Added out-of-state tuition
Abraham Baldwin Agr C	*	633	978
Agnes Scott C	4,375	5,175	
Armstrong St C	635	751	1,290
Art Inst of Atlanta	*	4,030	
Atlanta Area Tech	*	115	240
Atlanta Christian C	1,390	1,574	
Atlanta C of Art	2,950	3,850	
Atlanta Jr C	*	519	978
Augusta Area V-T Sch	*	28	
Augusta C	609	750	1,290
Bainbridge Jr C	*	523	978
Berry C	2,985	3,480	
Beulah Hts Bible C	1,080	1,050	
Brenau C	*	3,076	
Brewton-Parker C	1,665	1,725	
Brunswick Jr C	*	579	837
Clark C	3,115	3,315	
Clayton Jr C	429	513	978
Columbus C	615	735	1,290
Covenant C	3,840	4,070	
Crandall C	1,465	1,800	
Dalton Jr C	435	519	978
DeKalb CC	558	630	720
DeVry Inst of Tech	2,740	3,025	
Draughon's Jr C	1,800	2,000	
Emanuel Co Jr C	435	534	978
Emmanuel C	1,740	1,900	
Emmanuel C Sch of Christian Ministries	1,740	1,980	
Emory U	5,400	6,270	
Gainesville Jr C	*	537	978
Georgia C	*	771	1,290
Ga Inst of Tech	875	1,089	2,088
Georgia Military C	1,485	1,663	
Ga Southern C	672	855	1,290
Ga Southwestern C	648	834	1,350
Georgia St U	748	915	2,025
Kennesaw C	564	684	1,290
LaGrange C	2,205	2,415	
Marietta-Cobb Area V-T Sch	*	241	
Med C of Georgia	861	1,055	1,710
Mercer U	3,306	3,665	
Atlanta	2,700	2,997	
Southn Sch of Pharm	3,900	4,350	
Middle Ga C	*	514	489
Morehouse C	*	3,256	
Morris Brown C	2,700	3,170	
North Georgia C	667	801	1,290
No Georgia V-T Sch	*	100	300
Oglethorpe U	3,450	3,990	
Oxford C of Emory U	4,095	4,900	
Paine C	2,390	2,535	
Piedmont C	1,575	1,783	
Reinhardt C	1,986	2,244	
Savannah St C	700	855	1,290
Shorter C	2,350	2,700	
Southern Tech Inst	633	768	1,290
Spelman C	*	3,200	
Thomas County CC	*	1,575	
Tift C	2,160	2,385	
Toccoa Falls C	2,175	2,500	
U of Georgia	907	1,107	1,710
Valdosta St C	678	849	1,290
Walker Co Area V-T Sch	90	90	

at More than 3,300 U.S. Postsecondary Institutions

	1981-82	1982-83	
	Tuition and fees	Tuition and fees	Added out-of-state tuition
GEORGIA—Continued			
Waycross Jr C	438	522	978
Waycross-Ware County Area V-T Sch	*	185	
Wesleyan C	3,720	3,730	
West Ga C	*	834	1,290
Young Harris C	1,785	2,190	
HAWAII			
Brigham Young U Hawaii Campus	950	1,050	
Chaminade U of Honolulu	2,600	2,980	
Hawaii Loa C	2,800	3,200	
Hollywood Beauty C	*	2,919	
U of Hawaii			
Hilo	110	110	820
Honolulu CC	90	90	820
Kapiolani CC	90	90	820
Kauai CC	*	90	820
Leeward CC	90	90	820
Manoa	480	480	675
Maui CC	90	90	820
West Oahu C	*	400	600
Windward CC	90	90	820
IDAHO			
Boise State U	*	701	1,700
C of Idaho	3,980	4,600	
C of Southern Idaho	541	586	500
Idaho State U	680	705	1,700
Lewis-Clark St C	600	640	1,700
Mr Juan's C Hair Design	*	1,000	
North Idaho C	530	530	700
NW Nazarene C	3,165	3,480	
Ricks C	1,020	1,140	
U of Idaho	690	716	1,800
ILLINOIS			
American Academy Art	*	3,726	
Amer Cons of Music	3,400	3,400	
Augustana C	4,065	4,743	
Aurora C	3,660	3,975	
Barat C	4,200	4,800	
Belleville Area C	*	570	1,290
Black Hawk C	780	944	1,392
East Campus	784	944	1,392
Blackburn C	2,880	3,320	
Bradley U	*	4,590	
Brisk Rabbinical C	1,600	2,100	
Carl Sandburg C	516	612	1,836
Chicago St U	788	845	1,548
City C of Chicago			
Chicago City-Wide C	510	640	928
Loop C	510	640	928
Olive-Harvey C	*	640	928
Wright C	*	640	928
C of DuPage	630	680	1,665
C of Lake County	455	485	1,862
C of St Francis	3,330	3,560	
Columbia C	*	2,970	
Concordia C	2,709	3,021	
Cook County Hosp Sch of Radiologic Tech	*	250	
Danville Area CC	450	510	1,727
De Lourdes C	*	1,350	
De Paul U	3,588	4,260	
DeVry Inst of Tech	2,740	3,025	
Eastern Ill U	865	1,123	1,548
Elmhurst C	3,500	3,850	
Eureka C	3,750	3,750	
Evangelical Sch of Nursing	2,911	3,142	
Felician C	1,560	1,560	
Gem City C	*	2,040	
George Williams C	*	4,575	
Governors St U	*	819	1,548
Greenville C	*	4,290	
Highland CC	512	512	1,626
Illinois Benedictine C	3,745	4,201	
Illinois Central C	384	480	2,016
Illinois C	2,800	3,075	
Illinois Inst of Tech	4,970	5,700	
Illinois St U	*	1,079	1,560
Illinois Wesleyan U	4,867	5,427	
International Academy of Merchandising & Design	*	3,950	
John Wood CC	400	450	1,800
Kankakee CC	416	512	1,760
Kaskaskia C	*	448	1,856
Kendall C	*	3,468	
Kishwaukee C	538	562	1,510
Knox C	5,630	6,435	
Lake Forest C	*	6,745	
Lakeview Med Ctr Sch of Nursing	1,800	2,050	
LaSalle S of Beauty Cul	*	1,650	
Lewis U	3,660	4,190	
Lincoln C	4,000	4,300	
Lincoln Land CC	*	493	2,103
Loyola U of Chicago	*	4,170	
Lutheran Hosp Sch for Nurses	2,500	3,055	
MacCormac JC	2,970	2,970	
MacMurray C	3,990	4,470	
Mallinckrodt C	1,920	2,270	
McKendree C	3,150	3,390	
Methodist Med Ctr Sch of Nursing	1,150	1,375	
Midwest C of Engr	3,960	4,320	
Millikin U	4,382	4,857	
Monmouth C	4,500	5,335	
Moody Bible Institute	*	130	
ILLINOIS—Continued			
Moraine Valley CC	600	600	1,350
Morrison Inst of Tech	2,020	2,150	
Morton C	450	540	2,391
Mundelein C	3,840	4,155	
Natl C of Chiropractic	1,775	3,910	
National C of Ed	4,620	4,620	
North Central C	4,209	4,764	
North Park C	4,184	4,600	
Northeastern Illinois U	*	857	1,548
Northern Illinois U	*	1,097	1,560
Northwestern U	6,885	8,085	
Olivet Nazarene C	2,918	3,340	
Parkland C	510	510	2,319
Parks C of St Louis U	2,920	3,240	
Principia C	5,163	5,616	
Quincy C	*	4,000	
Robert Morris C	3,720	4,120	
Rockford C	3,990	4,490	
Roosevelt U	3,468	3,882	
Rosary C	4,000	4,300	
St Francis Hospital Sch of Radiologic Tech	225	300	
St Joseph Hospital Sch of Radiologic Tech	*	250	
St Mary of Nazareth Hosp Sch of Nursing	2,940	4,085	
St Mary's Hosp Sch of Med Tech	*	100	
St Xavier C	*	4,080	
Sauk Valley C	640	750	1,225
Scharfenberg Beauty Acad	1,200	1,500	
Sch of Art Inst of Chicago	4,200	5,105	
Sherwood Music Sch	2,000	2,200	
Southeastern Ill C	300	330	2,230
Southern Illinois U			
Carbondale	996	1,200	1,620
Edwardsville	952	1,042	1,596
Spertus C of Judaica	4,050	2,400	
Springfield C in Illinois	*	2,705	
Sterling Sch of Beauty Culture	*	720	
Thornton CC	664	664	1,500
Tri-County Bty Academy	*	1,275	
Trinity Christian C	3,350	3,700	
Trinity C	3,900	4,300	
U of Chicago	6,015	7,065	
U of Illinois			
Chicago Circle	1,080	1,200	1,644
Medical Center	1,229	1,494	1,644
Urbana-Champaign	1,110	1,210	1,644
West Suburban Hosp Sch of Nursing	2,400	2,700	
Western Illinois U	*	1,082	1,548
Wheaton C	4,084	4,780	
INDIANA			
Ancilla C	965	1,102	
Anderson C	3,560	3,840	
Ball St U	1,116	1,275	1,605
Bethel C	2,953	3,220	
Butler U	3,850	4,440	
Calumet C	1,730	2,033	
DePauw U	*	6,250	
Earlham C	5,745	6,520	
Fort Wayne Bible C	2,670	3,190	
Franklin C	4,400	4,790	
Good Samaritan Hospital Sch of Radiologic Tech	*	150	
Goshen C	3,790	4,165	
Grace C	3,196	3,546	
Hanover C	3,250	3,600	
Huntington C	3,735	4,085	
Indiana Barber/Stylist C	*	3,130	
Indiana Central U	3,650	4,100	
Indiana Inst of Tech	3,105	3,510	
Indiana St Beauty C	*	2,018	
Indiana St U	*	1,275	1,755
Evansville	960	1,080	1,440
Indiana U			
Bloomington	1,110	1,341	2,415
East	1,010	1,154	1,612
Kokomo	854	1,128	1,604
Northwest	854	1,124	1,682
South Bend	848	1,130	1,612
Southeast	848	1,158	1,612
Indiana U-Purdue U			
Fort Wayne	940	1,164	1,626
Indianapolis	960	1,213	1,965
Indiana Voc-Tech C			
Eastcentral	*	970	765
Kokomo	800	972	765
Lafayette	*	977	765
Northcentral	*	963	765
Southcentral	*	956	
Southwest	*	987	765
Whitewater	*	981	765
International Bus C	*	3,760	
ITT Tech Inst/Bus Inst	*	4,250	
La Porte Bus C	1,845	2,085	
Lockyear C	*	1,725	
Lutheran Hosp Sch of Nurs	*	2,547	
Manchester C	3,600	4,250	
Marian C	3,560	3,295	
Martin Ctr C	*	2,250	
Michiana C, Commerce	*	1,485	
Oakland City C	3,063	3,375	
Odessa's C of Bty Culture	*	1,600	
Parkview-Meth Hosp Sch of Nursing	1,800	2,000	600
Purdue U	1,158	1,350	2,450
Calumet	1,120	1,171	1,626
INDIANA—Continued			
Rose-Hulman Inst of Tech	4,140	4,750	
St Francis C	2,883	3,298	
St Joseph's C	3,520	4,090	
St Mary-of-the-Wds C	3,611	3,990	
St Mary's C	5,020	5,237	
St Meinrad C	2,329	2,470	
Taylor U	4,093	4,514	
Tri-State U	3,360	4,266	
U of Evansville	3,825	4,288	
U of Notre Dame	4,630	5,950	
Valparaiso U	4,072	4,782	
Vincennes U	810	1,010	1,660
Wabash C	4,785	5,280	
IOWA			
Allen Mem Hos Lutheran Sch of Nursing	*	1,598	
American Inst of Business	2,175	2,370	
American Inst. Comm	2,713	2,863	
Bernel C Cosmet. Ames	*	2,150	
Fort Dodge	1,850	2,200	
Briar Cliff C	3,250	3,450	
Buena Vista C	4,270	4,910	
Central C	4,214	4,740	
Clarke C	3,475	4,150	
Clinton CC	620	708	310
Coe C	4,550	5,370	
Cornell C	5,112	5,616	
Des Moines Area CC	*	720	1,440
Divine Word C	2,800	3,000	
Dordt C	3,400	3,850	
Drake U	4,590	5,230	
Faith Baptist Bible C	2,160	2,520	
Finley Hosp Sch of Nursing	3,206	3,546	
Graceland C	3,695	4,090	
Grand View C	2,890	3,390	
Grinnell C	5,950	6,710	
Hamilton Bus C	2,250	2,400	
Hamilton Tech C	*	2,850	
Hawkeye Inst of Tech	800	800	1,600
Indian Hills CC			
Centerville	670	750	315
Ottumwa	615	750	315
Iowa Methodist Sch of Nursing	*	2,820	
Iowa St U	950	1,040	1,540
Iowa Wesleyan C	4,055	4,625	
Iowa Western CC	645	845	387
J Edmundson Mem Hosp			
Sch of Nursing	1,383	1,257	118
Sch of Radiologic Tech	150	200	
La James C of Hairstyling			
Fort Dodge	*	2,100	
Mason City	*	2,100	
Loras C	3,700	4,180	
Luther C	*	5,225	
Maharishi Intl U	3,465	4,320	
Marshalltown CC	*	680	620
Marshalltown Comm Sch of Nursing	*	1,200	
Marycrest C	3,720	4,200	
Mount Mercy C	3,400	3,970	
Mount St Clare C	1,900	2,450	
North Iowa Area CC	635	660	300
NE Iowa Tech Inst	200	600	600
Northwestern C	3,645	3,895	
Open Bible C	1,970	2,170	
Ottumwa Beauty Acad	*	1,098	
St Ambrose C	3,630	4,410	
St Joseph Mercy Sch of Nursing	2,553	2,553	
St Luke's Hosp Sch of Nursing	3,340	3,800	
St Luke's Sch of Nursing	2,706	3,119	
Schoitz Mem Hosp Sch of Radiologic Tech	*	350	
Simpson C	4,535	5,035	
Sioux Empire C	2,750	2,750	
Southeastern CC			
North	612	657	315
South	612	657	315
Southwestern CC	554	660	330
Spencer Sch of Business	2,625	2,850	
Stewart Hairstylist Training Ctr	1,860	2,355	
Stewart Sch of Hair Styling: Sioux City	1,673	1,875	
U of Dubuque	3,650	4,275	
U of Iowa	950	1,040	1,540
U of Northern Iowa	900	990	1,050
Upper Iowa U	3,690	4,140	
Vennard C	1,838	1,900	
Waldorf C	3,590	4,250	
Western Iowa Tech CC	700	605	578
Westmar C	3,600	4,130	
William Penn C	4,710	5,110	
KANSAS			
Baker U	2,950	3,370	
Barton County CC	430	465	970
Benedictine C	3,200	3,700	
Bethany C	2,740	3,090	
Bethel C	3,112	3,520	
Brown Mackie C	*	3,335	
Butler County CC	435	510	1,030
Central C	3,150	3,400	
Colby CC	520	540	1,110
Cowley County CC	450	450	1,050
KANSAS—Continued			
Dodge City CC	446	486	970
Donnelly C	*	1,100	
Emporia St U	700	756	794
Fort Hays St U	690	945	945
Fort Scott CC	300	300	1,035
Friends Bible C	3,043	3,538	
Friends U	3,260	3,525	
Garden City CC	429	486	970
Hesston C	3,080	3,500	
Highland CC	400	550	900
Hutchinson CC	*	462	970
Independence CC	420	480	730
Johnson County CC	525	525	1,050
Kansas Newman C	2,852	3,315	
Kansas St U	764	898	1,316
Kansas Tech Inst	173	421	732
Kansas Wesleyan	3,158	3,570	
Manhattan Christian C	1,750	1,678	
Marymount C	2,950	3,225	
McPherson C	2,950	3,490	
Mid-Amer Nazarene C	2,258	2,394	
Neosho Co CC	370	430	975
NW Kan Area V-T Sch	*	615	
Ottawa U	3,071	3,392	
Pittsburg State U	*	726	794
Pratt CC	450	514	946
St John's C	2,600	2,750	
St Mary C	2,510	2,850	
St Mary of Plains C	2,910	3,110	
Seward County CC	420	480	1,255
Southwestern C	2,740	3,050	
Sterling C	3,100	3,350	
Tabor C	2,668	3,320	
U of Kansas	800	904	1,316
C of Health Sciences	600	724	1,296
Washburn U of Topeka	920	1,224	750
Wichita St U	780	930	1,316
KENTUCKY			
Alice Lloyd C	2,030	2,050	
Asbury C	3,209	3,268	
Ashland CC	390	390	780
Bellarmine C	2,850	3,350	
Berea C	113	118	
Brescia C	*	2,700	
Campbellsville C	2,440	2,640	
Cumberland C	2,124	2,380	
Eastern Ky U	580	724	1,348
Elizabethtown CC	390	390	780
Georgetown C	3,010	3,310	100
Hazard CC	390	390	780
Inst of Elec Tech	2,138	2,850	
Jefferson CC	380	390	780
Kentucky Christian C	1,596	1,758	
Kentucky C of Tech	*	3,105	
Kentucky Wesleyan C	3,040	3,245	
Lees JC	2,200	2,400	
Lexington Tech Inst	562	846	1,624
Lindsey Wilson C	1,978	2,420	
Louisville Sch of Art	2,150	2,380	
Louisville Tech Inst	*	3,250	
Madisonville CC	390	390	780
Maysville CC	390	390	780
Midway C	2,400	2,730	
Northern Kentucky U	626	714	1,348
Paducah CC	390	390	780
Pikeville C	2,550	2,825	
Prestonburg CC	390	390	780
St. Catharine C	1,800	2,100	
Somerset CC	390	390	780
Southeast CC	390	390	780
Spalding C	2,872	3,072	
Sue Bennett C	1,250	1,320	
Thomas More C	3,140	3,880	
Transylvania U	4,800	5,320	
Union C	3,000	3,450	
U of Kentucky	*	846	1,624
Ctr at Ft Knox	*	846	1,624
U of Louisville	*	846	1,624
Watterson C	2,310	2,415	
Western Kentucky U	580	714	1,348
LOUISIANA			
AIRCO Tech Inst	3,725	3,725	
Bossier Parish CC	16	36	
Centenary C of La	2,820	3,160	
D-Jay's Sch of Beauty Arts and Sciences	*	2,457	
Geneva's Beauty C	*	1,250	
Lafayette Regional Inst	*	0	30
Louisiana C	*	1,954	
Loyola U	3,252	3,717	
Meadows-Draughon C	*	2,795	
Newcomb C of Tulane U	*	6,550	
Our Lady of Holy Cross C	2,250	2,575	
St Mary's Dominican C	*	3,890	
Southern U in Shreveport	372	394	630
Tallulah V-T Sch	*	0	270
Tulane U	5,681	6,550	
MAINE			
Andover C	2,025	2,100	
Bates C	*	8,100	
Beal C	2,525	2,625	
Bowdoin C	6,865	7,665	
Central Beauty Sch	1,800	2,000	
Central Maine Med Ctr Sch of Radiologic Tech	*	400	
Central Maine Voc Tech Inst	525	630	600
Colby C	6,540	7,650	
MAINE—Continued			
C of the Atlantic	4,350	4,850	
D'Lor Beauty Sch	*	1,900	
Eastern Maine V-T Inst	700	700	600
Husson C	3,350	4,275	
Josephine's Sch of Hair Fashion	1,500	2,000	
Maine Maritime Acad	*	2,455	1,720
Mid-State Business Sch: Auburn	*	2,215	
Mr Bernard's, Hair Fash	*	2,450	
Nasson C	4,680	5,295	
Northern Maine V-T Inst	585	660	600
Portland School of Art	3,550	4,320	
St Joseph's C	*	3,875	
St Mary's Gen Hospital Sch of Nursing	*	1,450	
Southern Maine V-T Inst	600	600	600
Thomas C	4,070	4,665	
Unity C	3,800	4,440	
U of Maine			
Augusta	930	1,350	2,310
Farmington	*	1,385	2,310
Fort Kent	*	1,350	2,310
Machias	930	1,375	2,310
Orono	*	1,440	2,790
Presque Isle	*	1,370	2,310
U of New England	4,360	4,775	
U of Southern Maine	990	1,434	2,790
Wash Co Voc Tech Inst	520	630	500
Westbrook C	4,400	5,035	
MARYLAND			
Allegany CC	604	722	1,320
Anne Arundel CC	690	780	2,340
Baltimore Art Inst	*	2,200	
Bowie St C	1,090	1,260	1,040
Broadcasting Inst of Md	*	2,500	
Capitol Inst of Tech	2,376	2,988	
Catonsville CC	558	604	1,605
Cecil CC	450	555	1,530
Charles County CC	625	800	1,500
Chesapeake C	509	509	2,217
C of Notre Dame	3,450	3,850	
Columbia Union C	4,252	4,334	
Control Data Inst of Baltimore	*	5,325	
Coppin St C	960	1,160	1,040
Eastern Christian C	*	1,140	
Essex CC	630	634	1,664
Frederick CC	*	588	1,524
Frostburg State C	1,132	1,261	1,040
Garrett CC	336	563	2,100
Goucher C	5,515	6,275	
Grtr Baltimore Med Ctr Sch of Radiologic Tech	48	150	
Hagerstown JC	543	630	1,470
Harford CC	630	700	1,950
Hood C	4,825	5,585	
Howard CC	*	728	2,072
Intl Bartending Inst	*	390	
Johns Hopkins U	5,850	6,920	
Laurel Sch of Hair Design	*	1,300	
Lor France Academy of Beauty Culture	*	1,750	
Loyola C	3,350	3,950	
Maryland C of Art & Design	3,210	3,300	
Maryland Inst C of Art	4,200	4,850	
Mercy Hosp Sch of Radiologic Tech	*	400	
Morgan St U	1,130	1,210	1,037
Mt St Mary's C	3,650	4,300	
Prince George's CC	710	736	2,026
St John's C	6,000	6,700	
St Mary's C of Md	1,125	1,405	1,000
Salisbury State C	*	1,206	1,040
Sinai Hosp of Balt Sch of Radiologic Tech	*	200	
Strayer Bus C	1,440	1,800	
Towson St U	1,095	1,218	1,040
U of Baltimore	990	1,145	1,070
U of Maryland			
Baltimore Co	1,028	1,224	2,118
College Park	*	1,185	2,118
Eastern Shore	860	962	1,589
University C	1,545	1,690	
Villa Julie C	2,540	2,850	
Washington Bible C	2,250	2,356	
Washington C	4,010	4,821	
Western Maryland C	4,500	5,200	
Woodridge Sch for Secretaries	*	1,969	
Wor-Wic Tech CC	510	570	2,010
MASSACHUSETTS			
American Intl C	4,041	4,290	
Amherst C	7,250	8,255	
Anna Maria C	3,600	4,300	
Aquinas JC			
Milton	2,600	3,000	
Newton	2,500	3,000	
Assumption C	*	4,930	
Atlantic Union C	4,751	5,010	
Babson C	4,512	6,364	
Bay Path JC	*	3,700	
Baystate Med Ctr Sch of Nursing	2,500	2,700	
Becker JC			
Leicester	2,510	2,830	
Worcester	2,510	2,830	

Continued on Following Page

Tuition

Continued from Preceding Page

MASSACHUSETTS—Continued

	1981-82 Tuition and fees	1982-83 Tuition and fees	1982-83 Added out-of-state tuition
Bentley C	3,970	5,100	
Berklee C of Music	3,260	3,510	
Berkshire Christian C	2,775	2,775	
Berkshire CC	602	734	1,464
Blue Hills Tech Inst	1,800	2,160	
Boston C	5,180	6,150	
Boston Consv of Music	3,830	4,410	
Boston U	6,390	7,275	
Bradford C	5,050	5,800	
Brandeis U	6,670	7,830	
Bridgewater State C	*	1,110	1,947
Bristol CC	642	724	1,464
Bunker Hill CC	638	739	1,464
Burdett Sch	*	4,150	
Butera Sch of Art	*	3,365	
Cape Cod CC	622	719	1,464
Central New England C	*	4,000	
Clark U	6,510	7,186	
C of the Holy Cross	5,400	6,200	
C of Our Lady of Elms	3,500	3,950	
Control Data Inst	4,995	5,375	
Curry C	5,000	5,835	
Dean JC	4,580	5,035	
Dudley Hall Career Institute	*	2,220	
East Coast Aero Tech Sch	3,805	3,805	
Eastern Nazarene C	2,996	3,326	
Emerson C	5,205	5,900	
Emmanuel C	4,900	5,080	
Endicott C	4,150	4,650	
Fisher JC	3,650	4,200	
Fitchburg State C	*	1,015	1,947
Forsyth Sch for Dental Hygienists	5,300	5,650	
Framingham State C	*	1,127	1,947
Franklin Institute of Boston	3,470	4,100	
Goddard Mem Hosp Sch of Rad Tech	*	500	
Gordon C	4,605	5,247	
Greenfield CC	602	740	1,464
Hampshire C	7,780	8,581	
Harvard-Radcliffe C's	7,490	8,195	
Hebrew C	810	1,010	
Hellenic C	3,000	3,095	
Henri's Sch of Hair Design	1,500	1,800	
Holyoke CC	627	749	1,464
Katharine Gibbs Sch	4,200	4,650	
LaBaron Hairdressing Academy, Brockton	1,687	1,887	
LaBaron Hairdressing Academy	*	1,515	
Laboure JC	2,800	3,230	
Lasell JC	4,335	4,960	
Lesley C	4,800	5,440	
M Fazio Inst of Beauty Culture	*	1,445	
Marian Court JC Bus	2,125	2,520	
Mass Bay CC	633	719	1,464
Mass C of Art	*	1,145	1,947
Mass C of Pharmacy & Allied Health Sci	4,365	4,410	
Mass Inst of Tech	7,400	8,700	
Massasoit CC	602	739	1,464
Merrimack C	4,560	4,960	
Middlesex CC	622	787	1,464
Montserrat Sch Vis Art	1,850	2,250	
Mount Holyoke C	6,610	7,750	
Mount Ida Jr C	3,600	4,044	
Mt Wachusett CC	625	774	1,464
New England Baptist Hosp Sch Nursing	2,295	2,470	
New England Conservatory of Music	5,500	6,250	
New England Deac Hosp Sch of Nursing	3,460	4,005	
New England Inst Applied Arts & Sci	3,025	3,670	
New Style Barber Sch	*	1,800	
Newbury JC	3,400	3,775	
Nichols C	4,010	4,390	
N Adams State C	*	1,150	1,947
North Shore CC	622	674	1,464
NE Broadcasting Sch	2,500	2,800	
NE Inst of Indust Tech	2,590	2,670	
Northeastern U	4,792	5,338	
Northern Essex CC	602	778	1,464
Pine Manor C	6,195	6,970	
Quinsigamond CC	630	779	1,464
Regis C	4,270	4,955	
RETS Electronic Schs	*	4,970	
Roxbury CC	*	680	1,454
St Hyacinth C-Sem	*	3,105	
Salem State C	*	1,047	1,947
Sch of Museum of Fine Arts	4,555	4,955	
Simmons C	5,906	6,658	
Simon's Rock of Bard C	6,665	6,880	
Smith C	6,800	7,820	
Southeastern Mass U	891	1,114	2,151
Springfield C	4,133	4,500	
Springfield Tech CC	612	765	1,464
Stonehill C	4,275	4,850	
Suffolk U	2,935	3,720	
Swain Sch of Design	3,450	3,990	
Tufts U	*	7,710	
U of Lowell	*	1,226	2,256
U of Massachusetts			
Amherst	1,160	1,587	2,557
Boston	1,084	1,374	2,557
Wellesley C	6,530	7,510	
W New England C	3,450	4,118	
Westfield State C	*	1,139	1,947
Wheaton C	7,010	7,825	
Wheelock C	5,050	5,550	
Williams C	7,016	7,866	
Worcester City Hosp Sch of Nursing	100	800	400
Worcester Poly Inst	6,043	6,907	
Worcester State C	*	993	1,947

MICHIGAN

	1981-82 Tuition and fees	1982-83 Tuition and fees	1982-83 Added out-of-state tuition
Adrian C	3,494	4,974	
Alma C	4,144	5,629	
Alpena CC	*	682	1,023
Andrews U	3,975	4,950	
Aquinas C	3,425	4,498	
Baker JC of Bus	1,800	2,220	
Blodgett Mem Med Ctr Sch of Nursing	*	1,344	
Bronson Meth Hosp Sch of Nursing	1,550	2,128	500
Calvin C	3,000	3,950	
Ctr for Creative Studies	3,200	3,936	
Central Mich U	1,000	1,340	2,000
Chapin Jr C of Bus	*	1,850	
Chic U of Cosmetology	*	2,300	
Davenport C of Bus	2,745	3,410	
Ferris St C	1,209	1,464	1,752
General Motors Inst	1,408	1,864	
Glen Oaks CC	622	704	
Gogebic CC	510	570	480
Grace Bible C	1,455	1,700	
Grand Rapids Baptist C and Sem.	2,850	3,160	
Grand Rapids Jr C	720	860	1,260
Grand Valley St C	1,200	1,380	1,800
Great Lakes Bible C	1,745	1,845	
Highland Park CC	650	650	600
Hillsdale C	4,870	5,370	
Hope C	4,520	5,010	
Jackson CC	600	840	480
Jordan C	2,000	2,200	
Kalamazoo C	5,529	6,492	
Kellogg CC	*	645	990
Kendall Sch of Design	2,556	3,300	
Krainz Woods Acad of Med Lab Tech	3,800	4,000	
Lake Michigan C	*	710	480
Lansing CC	600	645	900
Lawrence Inst of Tech	1,725	1,890	
Lewis C of Bus	*	3,060	
Madonna C	*	1,950	
Marygrove C	3,225	3,787	
Mercy Sch of Nursing	1,855	3,900	
Mercy C of Detroit	*	3,140	
Merrill Fashion Inst	*	2,550	
Mich Christian C	2,150	2,485	
Michigan Tech Institute	2,800	4,000	
Monroe Co CC	570	570	270
Muskegon Bus C	1,920	2,040	
Nazareth C	4,240	4,790	
Oakland CC	*	632	300
Olivet C	*	5,120	
Reformed Bible C	2,180	2,480	
Saginaw Vly St C	*	1,440	1,350
St Clair County CC	612	675	788
St Mary's C	1,800	2,100	
Shaw C at Detroit	3,060	3,900	
Siena Heights C	2,940	3,330	
Spring Arbor C	3,900	4,400	
Suomi C	5,500	4,900	
U of Detroit	4,230	4,810	
Walsh C of Acctncy and Bus Administration	1,590	1,850	
Washtenaw CC	480	720	900
Wayne Cty Gen Hosp Rad & Tech Prog	*	200	
West Shore CC	650	650	650
Western Mich U	*	1,290	1,710
Wm Tyndale C	2,192	2,250	

MINNESOTA

	1981-82 Tuition and fees	1982-83 Tuition and fees	1982-83 Added out-of-state tuition
Academy of Accntncy	*	3,050	
Albert Lea Area Vocational-Tech Inst	*	640	
Anoka-Ramsey CC	664	821	821
Arrowhead CC			
Hibbing	*	821	821
Itasca	*	821	821
Mesabi	*	821	821
Rainy River	*	821	821
Vermilion	*	821	821
Augsburg C	4,200	4,820	
Austin CC	664	821	821
Bemidji Area V-T Inst	*	594	645
Bemidji St U	800	956	788
Bethany Lutheran C	2,540	2,870	
Bethel C	3,925	4,550	
Canby Area Voc-Tech Inst	414	576	612
Carleton C	5,755	6,951	
C of St Benedict	3,690	4,390	
C of St Catherine	3,815	4,530	
C of St Scholastica	3,728	4,271	
C of St Thomas	3,530	4,160	
Concordia C			
Moorhead	4,170	4,805	
St Paul	3,090	3,450	
Crosier Sem JC	2,200	1,700	
Detroit Lakes Area Voc-Tech Inst	409	601	540
Dr Martin Luther C	1,500	1,620	
East Grnd Forks Area Voc-Tech Inst	*	576	575
Eveleth Area V-T Inst	*	576	575
Fergus Falls CC	664	821	821
Fern's Beauty Sch	2,000	2,500	
Golden Valley Lutheran C	3,855	4,583	
Gustavus Adolphus C	*	5,350	
Hamline U	4,750	5,350	
Inver Hills CC	664	821	821
Jackson Area Voc-Tech Inst	400	576	555
Lakewood CC	664	821	821
Lowthian Fashion Sch	3,180	3,495	
Macalester C	5,480	6,280	
Mankato St U	729	829	788
Med Inst of Minn	3,050	3,400	
Metropolitan St U	800	599	283
Minneapolis C of Art & Design	3,700	4,070	
Minneapolis CC	664	821	821
Minneapolis Drafting Sch	*	2,300	

MINNESOTA—Continued

	1981-82 Tuition and fees	1982-83 Tuition and fees	1982-83 Added out-of-state tuition
Minnesota Bible C	1,650	1,800	
Moorhead Area Voc-Tech Inst	484	581	702
Moorhead St U	822	934	788
Normandale CC	664	821	821
North Hennepin CC	664	821	821
Northland CC	664	821	821
Northwest Inst of Med Lab Tech	2,190	2,190	
Northwestern C	3,450	3,900	
NW Electronics Inst	1,488	1,665	
Oliver Thein Bty Sch	1,375	1,725	
Pine Tech Inst	400	576	533
Pipestone Tech Inst	*	578	575
Rasmussen Sch of Bus	2,475	2,835	
Ritter St. Paul Bty C	*	1,700	
Robinson Beauty Sch	2,000	2,350	
Rochester CC	664	821	821
St Cloud Area V-T Inst	430	590	635
St Cloud Hosp Sch of Nur	*	1,950	
St Cloud St U	732	973	788
St John's U	3,965	4,415	
St Mary's C	3,790	4,300	
St Mary's Hosp Sch of Rad Tech	*	281	
St Mary's JC	2,880	3,240	
St Olaf C	4,710	5,335	
St Paul Bible C	2,012	2,580	
St Paul V-T Inst	491	675	620
Southwest St U	700	900	700
Thief River Falls Area V-T Inst	400	601	600
U of Minnesota			
Duluth	1,011	1,470	2,572
Morris	1,140	1,260	2,205
Tech C, Crookston	1,072	1,347	2,357
Twin Cities	1,245	1,528	2,178
Wadena Area V-T Inst	433	596	675
Willmar Area Voc-Tech Inst	442	606	636
Willmar CC	664	821	821
Winona St U	770	953	788
Worthington CC	664	821	821

MISSISSIPPI

	1981-82 Tuition and fees	1982-83 Tuition and fees	1982-83 Added out-of-state tuition
Alcorn St U	768	825	850
American Beauty C	*	1,495	
Belhaven C	2,575	3,125	
Blue Mountain C	1,850	2,010	
Clarke C	*	1,680	
Copiah-Lincoln Jr C	360	400	200
Delta St U	*	770	926
East Central Jr C	390	456	400
East Miss Jr C	350	380	450
Hinds JC	310	350	530
Jackson St U	*	832	926
Jones Co Jr C	*	400	600
Millsaps C	3,300	4,110	
Mississippi C	*	2,460	
Miss Delta Jr C	330	330	600
Miss Gulf Coast JC Jeff Davis campus	310	360	400
Mississippi St U	930	1,146	926
Miss Valley St U	800	800	926
Northeast Miss Jr C	430	480	600
Pearl River Jr C	350	380	550
Phillips C	*	3,500	
Tougaloo C	2,220	2,450	
U of Mississippi	*	1,165	926
Medical Ctr	*	966	926
U of So Mississippi	*	1,070	926
Wood JC	1,200	1,260	

MISSOURI

	1981-82 Tuition and fees	1982-83 Tuition and fees	1982-83 Added out-of-state tuition
Avila C	3,150	3,551	
Bapt Bible C	850	1,150	
Baptist Mem Hosp Sch of Rad Tech	*	165	
Barnes Hospital Sch of Nursing	1,310	2,005	
Calvary Bible C	2,020	2,200	
Cardinal Glennon C	*	1,700	
Cardinal Newman C	2,900	3,960	
Central Bible C	1,716	1,770	
Central Christian C of the Bible	1,070	1,190	
Central Missouri St U	525	630	675
Chillicothe Beauty Acad	950	1,050	
Columbia C	3,795	4,045	
Crowder C	280	310	770
Culver-Stockton C	3,350	3,700	
Drury C	3,150	3,650	
Evangel C	2,172	2,447	
Fontbonne C	3,660	4,100	
Hannibal-LaGrange C	2,345	2,696	
Hickey School	*	3,975	
Jefferson C	*	360	540
Jewish Hosp of St L Sch of Nurs	*	1,700	
Kansas City Art Inst	5,100	5,700	
Kemper Mil Sch & C	*	2,505	
Lincoln U	*	565	440
Lindenwood C's	4,100	4,600	
Longview CC	450	600	810
Luthern Med Ctr Sch of Nursing	2,450	2,955	
Maple Woods CC	480	600	810
Maryville C St Louis	3,686	4,170	
Mineral Area C	210	330	470
Missouri Baptist C	2,450	2,600	
Missouri Inst of Tech	2,740	3,025	
Mo Southern St C	500	600	600
Missouri Valley C	3,050	3,480	
Mo Western St C	*	780	580
Nevada Area Voc-Tech Sch	1,150	1,300	
Nichols Career Ctr	*	860	
Northeast Mo St U	390	480	480
Northwest Mo St U	530	760	400
Park C	3,290	3,640	
Penn Valley CC	*	600	810
Pike-Lincoln Counties Area Voc-Tech Sch	*	1,800	
Pioneer CC	*	600	810
Poplar Bluff Area Voc-Tech Sch Prac Nurse Prog	975	1,125	
Rockhurst C	*	3,950	

MISSOURI—Continued

	1981-82 Tuition and fees	1982-83 Tuition and fees	1982-83 Added out-of-state tuition
Rolla C of Hairstyling	*	1,250	
St Louis Christian C	1,575	1,575	
St Louis C of Pharmacy	2,300	2,600	
St Louis CC			
Florissant Valley	*	615	555
Forest Park	277	615	555
Meramec	555	615	555
St Louis Cons of Music	3,210	4,210	
St Louis U	4,220	4,690	
St Mary's C of O'Fallon	2,026	2,676	
St Mary's, Nursing	1,800	1,800	
St Paul's C	2,140	2,470	
Sch of the Ozarks	60	2,010	
Southeast Mo St U	390	550	500
Southwest Baptist U	2,670	3,075	
Southwest Mo St U	520	650	650
Stephens C	4,875	5,175	
Tarkio C	3,270	5,450	
Three Rivers CC	*	500	400
Trenton Jr C	*	360	672
U of Missouri			
Columbia	870	1,068	2,040
Kansas City	952	1,102	2,040
Rolla	1,015	1,165	2,040
St Louis	870	1,104	2,040
Washington U	6,250	7,179	
Webster C	3,638	3,975	
Westminster C	4,000	4,400	
William Jewell C	3,170	3,580	
William Woods C	4,160	4,540	

MONTANA

	1981-82 Tuition and fees	1982-83 Tuition and fees	1982-83 Added out-of-state tuition
Big Sky Bible C	*	1,566	
Billings Voc-Tech Ctr	*	450	
Carroll C	2,588	2,878	
C of Great Falls	2,850	2,850	
Dawson CC	*	375	450
Eastern Montana C	603	678	1,080
Flathead Valley CC	375	375	504
Great Falls V-T Ctr	300	450	880
Helena V-T Ctr	*	450	900
Miles CC	338	338	525
Missoula V-T Ctr	*	450	900
Montana C of Mineral Science & Technology	562	616	1,450
Montana St U	572	728	1,440
Northern Montana C	552	607	1,080
Rocky Mountain C	2,980	3,239	
U of Montana	747	801	1,440
Western Montana C	579	633	1,080

NEBRASKA

	1981-82 Tuition and fees	1982-83 Tuition and fees	1982-83 Added out-of-state tuition
Alliance Sch of Practical Nursing	510	585	653
Archbshp Bergan Mercy Hosp Rad Tech	700	700	
Bahner Beauty C	1,303	1,920	
Central Tech CC	522	585	293
Chadron St C	734	786	510
College of St Mary	*	3,810	
Concordia Teachers C	2,986	3,283	
Creighton U	3,700	4,070	
Dana C	3,600	4,100	
Doane C	3,750	4,100	
Grace C of the Bible	2,380	2,480	
Grand Island Sch of Bus	1,755	1,890	
Hastings C	3,430	3,820	
Kearney St C	745	805	510
Metro Tech CC	591	591	540
Mid Plains CC	*	450	125
Midland Lutheran C	3,500	3,850	
Neb Acad Hair Design	*	2,150	
Nebraska Christian C	1,190	1,295	
Nebraska Wesleyan U	3,630	4,138	
Nebraska Western C	*	585	270
Norfolk Beauty C	1,139	1,565	
Northeast Tech CC	486	546	300
Omaha C Hlth Careers	2,610	3,172	
Patricia Stevens Fashion and Secretarial C	*	3,790	
Peru St C	702	817	510
Platte Valley Bible C	900	960	
Southeast CC			
Fairbury-Beatrice	528	522	312
Lincoln	486	546	312
Milford	507	522	312
Stewart Sch of Hairstyling	*	1,875	
Union C	4,100	4,900	
U of Nebraska			
Lincoln	1,000	1,128	1,650
Medical Ctr	950	1,039	1,650
Omaha	*	1,054	1,650
Sch of Tech Agr	458	769	368
Wayne State C	*	821	510
York C	2,035	2,150	

NEVADA

	1981-82 Tuition and fees	1982-83 Tuition and fees	1982-83 Added out-of-state tuition
Clark County CC	*	510	2,000
N Nevada CC	*	510	2,000
Sierra Nevada C	2,000	2,250	
Truckee Meadows CC	*	510	2,000
U of Nevada			
Las Vegas	*	930	2,000
Reno	*	930	2,000
Western Nev CC	*	510	2,000

NEW HAMPSHIRE

	1981-82 Tuition and fees	1982-83 Tuition and fees	1982-83 Added out-of-state tuition
Castle JC	1,540	1,890	
Colby-Sawyer C	*	6,390	
Daniel Webster C	*	5,040	
Dartmouth C	7,050	8,190	
Empire Beauty Sch	1,600	2,000	
Franklin Pierce C	4,775	5,500	
Hesser C	2,590	2,800	
Houle's Beauty Acad	1,900	2,100	
Nathanial Hawthorne C	4,655	4,845	
New England C	*	5,990	
New Hampshire Hosp Sch of Nursing	1,000	1,000	
New Hampshire Tech Inst	*	950	2,450
NH Voc-Tech C			
Berlin	620	900	2,300
Claremont	600	900	2,300
Laconia	600	900	2,300
Manchester	600	900	2,300
Portsmouth	622	900	2,300

NEW HAMPSHIRE—Continued

	1981-82 Tuition and fees	1982-83 Tuition and fees	1982-83 Added out-of-state tuition
Notre Dame C	2,900	3,100	
Portsmouth Beauty Sch Hair Design	2,000	2,200	
Rivier C	3,050	3,600	
St Anselm C	4,300	5,050	
Thomas More Inst of Liberal Arts	*	1,800	
White Pines C	3,400	3,400	

NEW JERSEY

	1981-82 Tuition and fees	1982-83 Tuition and fees	1982-83 Added out-of-state tuition
Atlantic CC	550	704	2,281
Berkeley Sch	3,270	3,750	
Bloomfield C	3,450	4,470	
Brick Computer Sci Inst & Career Business Sch	*	2,600	
Brookdale CC	550	600	1,200
Caldwell C	3,200	3,450	
Centenary C	3,750	4,000	
Century Inst of Court Reporting	*	3,200	
C of St Elizabeth	3,450	4,200	
County C of Morris	*	700	1,730
Cumberland Co C	605	655	1,800
DeVry Inst of Tech	2,680	3,025	
Don Bosco C	2,860	2,860	
Dorothy Aristone's Sch of Paramed & Bus Prfssns	*	2,695	
Drew U	*	6,685	
Englewood Hosp, Nurs	1,650	1,650	
Essex County C	630	690	1,200
Fairleigh Dickinson U			
Edw Williams C	3,518	3,982	
Florham-Madison	4,262	4,826	
Rutherford	4,262	4,826	
Teaneck-Hackensack	4,262	4,826	
Felician C	2,470	2,550	
General Tech Inst Inc	*	2,342	
Georgian Ct C	2,900	3,200	
Helene Fuld Sch of Nurs Camden Co	650	850	
Holy Name Hosp Sch of Nursing	1,795	1,895	
Hudson Area Hosp Sch of Radiologic Tech	*	1,600	
Hudson Co CC	515	580	510
Jos Paterno Beauty C	*	2,625	
Lincoln Tech Inst	*	4,650	
Lyons Inst	3,000	3,000	
Maison de Paris Beauty College	*	2,200	
Mercer Co CC	520	640	1,200
Metropolitan Tech Inst	*	2,940	
Middlesex Co C	*	690	1,950
Monmouth C	4,580	5,182	
Monmouth Med Ctr Sch of Med Tech	*	500	
Natural Motion Inst of Hair Design	*	2,800	
Northeastern Bible C	2,930	3,360	
Ocean Co C	720	690	1,800
Orange Mem E Orange Gen Hosp Sch of Nurs	1,700	2,000	
Princeton U	7,250	8,380	
RETS Electronic Sch	*	3,105	
Rider C	3,600	4,000	
St Barnabas Med Prgm of Nuclear Med Tech	*	1,000	
St Peter's C	3,645	4,047	
Sch of Bus Machines	*	2,810	
Seton Hall U	3,270	4,296	
Somerset Co Tech Inst	*	700	
Stevens Inst of Tech	5750	6,500	
Taylor Bus Inst Bridgewater	*	3,500	
Union C	632	700	1,800
Upsala C	4,250	4,718	
Westminster Choir C	4,100	5,370	

NEW MEXICO

	1981-82 Tuition and fees	1982-83 Tuition and fees	1982-83 Added out-of-state tuition
Alamogordo Beauty C	2,200	2,350	
Artesia Christian C	*	800	
C of Santa Fe	3,000	3,400	
C of the Southwest	975	1,070	
Eastern NM U	*	698	1,286
Roswell	*	400	648
Las Cruces Beauty C	1,677	1,684	
Lea Regional Hosp Sch of Radiologic Tech	*	200	
New Mexico Hilnds U	908	531	1,286
New Mexico Inst of Mining and Tech	646	734	1,684
New Mexico JC	*	184	288
New Mexico Mil Inst	622	613	1,010
New Mexico St U	744	798	1,684
Alamogordo	384	384	648
Carlsbad	336	346	648
Grants	*	360	648
Northern New Mexico CC	396	336	688
St John's C	6,000	6,700	
San Juan C	*	370	648
U of Albuquerque	2,850	2,970	
U of New Mexico	720	768	1,680
Western New Mexico U	*	530	1,286

NEW YORK

	1981-82 Tuition and fees	1982-83 Tuition and fees	1982-83 Added out-of-state tuition
Adelphi U	*	5,030	
Albany Business C	2,500	2,500	
Albany C of Pharmacy	2,597	2,907	
Albany Med Ctr Sch of Nursing	*	1,250	
Alfred U	4,900	6,450	
Amer Acad of Dramatic Arts	2,510	2,975	
Austin Beauty Sch	*	1,950	
Bard C	7,708	8,880	
Barnard C	7,060	8,142	
Berkeley Sch	3,270	3,750	
Long Island	3,270	3,750	
New York	3,270	3,750	
Blake Business Sch	2,650	3,125	
Bramson ORT Tech Inst	1,800	2,150	
Briarcliffe Secrtl Sch			
Hicksville	2,795	3,195	
Mineola	2,795	3,195	
Brooklyn Ctr of LIU	3,660	4,779	
Broome CC	836	863	800
Bryant-Stratton Bus Inst			
Buffalo	2,775	2,985	
Rochester	2,775	2,985	

NEW YORK—Continued

	1981-82 Tuition and fees	-83 Tuition and fees	-83 Added out-of-state tuition
Bryant-Stratton Powelson Bus Inst	*	2,985	
Buffalo Gen Hosp Sch of Nursing	2,278	2,454	400
C for Human Services	*	4,045	
C of Insurance	3,876	3,930	
C of Mt St Vincent	3,880	4,410	
C of New Rochelle	3,510	4,110	
New Resources	2,710	2,880	
C of St Rose	*	3,990	
CW Post Ctr, LIU	*	5,056	
Canisius C	3,600	4,100	
Cathedral C of Immaculate Concptn	2,600	3,300	
Catholic Med Ctr Sch of Nursing	2,250	2,612	
Cayuga Co CC	900	990	990
Cazenovia C	4,175	4,465	
Central City Bus Inst	*	2,400	
Circle In Sq Theatre Sch	*	3,475	
City U of New York			
Bernard M Baruch C	976	1,126	700
Bronx CC	925	1,145	700
Brooklyn C	925	1,152	700
City C	925	1,141	700
C of Staten Island	978	1,128	700
De Hostos CC	986	1,125	700
Hunter C	925	1,125	700
John Jay C	964	1,140	700
Kingsborough CC	995	1,145	700
La Guardia CC	1,006	1,136	700
Lehman C	976	1,126	700
Manhattan CC	925	1,130	700
Medgar Evers C	966	1,126	700
New York City Tech C	968	1,118	700
Queens C	926	1,205	700
Queensborough CC	925	1,137	700
York C	925	1,130	700
Clarkson C of Tech	5,290	6,350	
Clinton CC	810	930	850
Colgate U	6,355	7,490	
Columbia Mem Hosp Sch of Nursing	1,217	1,829	368
Columbia U			
Columbia C	6,772	7,894	
Engr & Applied Sci	6,700	7,922	
Sch of Gen Studies	5,000	6,990	
Sch of Nursing	*	7,770	
Concordia C	3,080	3,385	
Cooper Union	*	300	
Cornell U	7,000	7,950	
Crouse Irvg Mem Hosp Sch of Nursing	2,475	2,475	
Daemen C	*	4,275	
Dominican C of Blauvelt	2,420	2,720	
Dowling C	3,600	4,620	
D'Youville C	*	4,050	
Eastman Sch of Music	*	7,304	
Eisenhower C of Roch Inst of Tech	4,491	5,184	
Eliz Seton C	2,850	2,925	
Elmira Business C	*	2,015	
Elmira C	4,225	5,450	
Fashion Inst of Tech	900	1,000	1,000
Five Towns C	2,750	3,050	
Fordham U	4,250	4,950	
Friends World C	3,500	4,000	
Fulton-Montgomery CC	950	933	850
Genesee CC	73[illegible]	870	800
Hamilton C	7,050	7,950	
Hartwick C	5,875	6,425	
Herkimer County CC	687	797	700
Hilbert C	2,400	2,820	
Hobart C	6,400	7,450	
Hofstra U	*	4,950	
Houghton C	3,920	4,207	
Hudson Valley CC	*	1,069	950
Inst of Design and Construction	1,820	1,820	
Interboro Inst	2,825	3,150	
Iona C	*	4,280	
Island Drafting & Tech Inst	2,520	3,050	
Ithaca C	5,000	5,526	
Jamestown Bus C	1,975	2,175	
Jamestown CC	860	1,000	900
Jefferson CC	1000	1,080	
Jewish Theo Sem of Amer	*	3,070	
Juilliard Sch	4,100	4,600	
Jr C of Albany	3,000	3,400	
Katharine Gibbs Sch	*	4,500	
Keuka C	4,960	4,960	
King's C	4,010	4,600	
Krissler Bus Inst	*	3,100	
Lab Inst of Merchandising	3,700	4,200	
Le Moyne C	*	4,360	
Malcolm King Harlem C Extension	*	1,344	
Mandl Sch of Medical and Dental Assistants	*	3,325	
Manhattan C	3,850	4,200	
Manhattanville C	4,880	6,440	
Mannes C of Music	4,050	4,575	
Maria C	*	2,530	
Maria Regina C	*	2,450	
Marion S. Whelan Sch of Prac Nurs of Geneva Gen Hosp	*	842	
Marist C	4,000	4,542	
Marymount C	4,410	4,895	
Marymount Manhattan C	3,200	4,070	
Mater Dei C	2,258	2,266	
Medaille C	3,060	3,060	
Mercy C	*	2,850	
Midtown Sch of Bus	2,755	2,755	
Misericordia Hosp			
Sch of Nursing	2,710	3,280	
Sch of Radiology	2,500	2,500	
Mohawk Beauty Culture School	1,275	1,500	
Molloy C	3,500	3,700	
Monroe Business Inst	3,525	3,570	
Mount St Mary C	3,350	4,280	
Mount Vernon Hosp Sch of Nursing	1,365	2,145	
Nassau CC	900	950	950
Nazareth C of Rochester	3,750	4,200	
New School for Social Research	4,180	5,310	

NEW YORK—Continued

	1981-82 Tuition and fees	1982-83 Tuition and fees	1982-83 Added out-of-state tuition
New York Food & Hotel Mgmt Sch	2,925	3,9[illegible]	
New York Inst of Tech	*	3,424	
New York Sch of Interior Design	3,100	3,970	
New York U	5,820	6,634	
Niagara U	3,690	4,170	
North Country CC	900	1,005	900
Nyack C	3,395	3,705	
Pace U			
New York City	3,848	4,360	
C of White Plains	3,848	4,300	
Pleasantville/Briarcliff	3,848	4,360	
Parsons Sch of Design	4,500	5,760	
Paul Smith's C	2,740	3,360	
Polytechnic Inst of NY	5,500	6,310	
Long Island	*	6,310	
Pratt Inst	5,010	5,410	
Printing Trades Sch	4,400	4,450	
Rensselaer Poly Inst	6,715	7,790	
Richard I Sch of Beauty Culture	*	2,350	
Roberts Wesleyan C	3,596	4,035	
Rochester Business Inst	2,250	2,550	
Rochester Inst of Tech	4,503	5,184	
Russell Sage C	4,785	5,400	
Sarah Lawrence C	7,250	8,210	
Sawyer Sch	*	2,970	
Sch of Visual Arts	*	4,200	
Siena College	*	4,150	
Skidmore C	6,390	7,310	
Southampton C of Long Island U	*	5,300	
St Bonaventure U	*	4,305	
St Elizabeth Hosp Sch of Nursing	2,430	2,530	
St John Fisher C	4,166	4,624	
St John's U	3,180	3,400	
St Joseph's C	2,700	3,020	
Suffolk	2,510	3,020	
St Joseph's Hosp Sch of Nursing	1,683	1,932	
St Lawrence U	5,745	6,800	
St Luke's Mem Hosp Cntr Sch. Med Radiography	1,300	1,500	
St Thomas Aquinas C	2,600	3,000	
St Vincent's Hosp Sch of Nursing	1,100	1,100	
St Vincent's Medical Ctr Sch of Nurs	*	1,500	
State U of New York			
A&T C at Alfred	1,155	1,155	700
A&T C at Canton	*	1,239	700
A&T C at Cobleskill	*	1,203	700
A&T C at Delhi	1,233	1,155	700
A&T C at Farmingdale	1,175	1,235	700
A&T C at Morrisville	1,180	1,330	700
Albany	1,300	1,220	700
Binghamton	1,171	1,180	700
Buffalo	1,229	1,240	700
C at Brockport	1,145	1,160	700
State U of New York			
C at Buffalo	1,152	1,155	700
C at Cortland	1,005	1,155	700
C of Environmental Sci & Forestry	1,150	1,126	700
C at Fredonia	1,075	1,155	700
C at Geneseo	1,175	1,175	700
C at New Paltz	1,315	1,174	700
C at Old Westbury	1,110	1,110	700
C at Oneonta	1,050	1,245	700
C at Plattsburgh	1,115	1,115	700
C at Potsdam	1,155	1,155	700
C at Purchase	1,185	1,300	700
C of Tech Utica-Rome	1,215	1,180	700
Downstate Med Ctr	1,130	1,130	700
Empire State C	*	1,087	700
Health Sciences Ctr Stony Brook	1,050	1,155	700
Maritime C	1,175	1,247	
Oswego	1,150	1,170	700
Stony Brook	*	1,155	700
Upstate Med Ctr	1,130	1,130	700
Sutton Secrtl Sch	2,250	2,600	
Syracuse U	5,400	6,220	
Tech Career Insts	3,200	3,600	
Tobe-Coburn Sch for Fashion Careers	4,200	5,350	
Touro C	3,290	3,290	
Traphagen Sch of Fash	2,680	2,865	
Trocaire C	2,500	2,650	
Ulster Co CC	930	1,066	1,000
Union C	6,399	7,399	
U of Rochester	6,169	7,060	
Utica Career Inst	1,360	1,360	
Utica C of Syracuse U	4,400	4,800	
Utica Sch of Commerce	2,100	4,800	
Vassar C	6,618	7,618	
Villa Maria C of Buffalo	*	2,500	
Wadhams Hall Sem-C	2,100	2,280	
Wagner College	*	4,212	
Wells C	6,050	6,830	
Westchester Bus Inst	*	3,180	
Westchester CC	922	1,022	1,350
William Smith C	6,400	7,450	
Wood Sch	3,200	4,200	
Yeshiva U	*	5,205	

NORTH CAROLINA

	1981-82 Tuition and fees	1982-83 Tuition and fees	1982-83 Added out-of-state tuition
Ashmore C	*	2,214	
Atlantic Christian C	2,516	2,994	
Belmont Abbey C	3,170	3,610	
Blanton's JR C	*	2,064	
Brevard C	2,230	1,870	750
Cabarrus Mem Hosp Sch of Nursing	*	984	
Catawba C	3,347	3,760	
Chowan C	2,180	2,380	
Davidson C	4,900	5,310	
Duke U	5,784	6,450	
Elon C	2,490	2,740	
Gardner-Webb C	2,960	3,260	
Greensboro C	3,100	3,410	
Guilford C	3,860	4,350	
High Point C	3,050	3,320	
John Wesley C	1,574	1,574	
Johnson C Smith U	2,482	2,700	
Lees-McRae C	2,247	2,462	
Lenoir-Rhyne C	3,465	4,130	

NORTH CAROLINA—Continued

	1981-82 Tuition and fees	1982-83 Tuition and fees	1982-83 Added out-of-state tuition
Livingstone C	*	2,720	
Louisburg C	2,460	2,775	
Mars Hill C	3,170	3,450	
Meredith C	2,750	3,050	
Methodist C	2,870	3,280	
Montreat-Anderson C	2,350	2,590	
Mount Olive C	2,250	2,400	
Peace C	2,140	2,400	
Pfeiffer C	3,025	3,450	
Piedmont Aerospace Inst	2,421	2,625	
Piedmont Bible C	1,970	2,140	
Queens C	3,750	4,200	
Rex Hosp Sch of Med Tech	600	800	
Roanoke Bible C	1,225	1,294	
Rutledge C of Winston-Salem	*	1,824	
Sacred Heart C	2,900	3,264	
St Andrews Presby C	3,950	4,850	
St Mary's C	3,145	3,520	
Salem C	3,925	4,415	
Wake Forest U	4,100	4,700	
Warren Wilson C	3,510	3,960	
Watts Sch of Nurs	*	1,065	
Wingate C	*	2,596	

NORTH DAKOTA

	1981-82 Tuition and fees	1982-83 Tuition and fees	1982-83 Added out-of-state tuition
Interstate Business C	*	2,400	
Jamestown C	3,900	4,300	
Lake Regional CC	*	770	270
Mary C	2,580	2,840	
Mayville St C	654	705	561
N D St Sch of Science	584	630	561
North Dakota St U	733	732	758
Bottineau	600	698	561
Northwest Bible C	*	1,700	
Standing Rock CC	750	750	
Trinity Bible Inst	1,858	1,986	
Trinity Sch of Nursing	*	3,040	756
Turtle Mtn Sch of Paramedics	*	1,368	
U of North Dakota	*	804	768
Valley City St C	*	707	562

OHIO

	1981-82 Tuition and fees	1982-83 Tuition and fees	1982-83 Added out-of-state tuition
Acad. Communicative Art	*	2,250	
Antioch C	6,320	6,330	
Art Acad of Cincinnati	2,797	2,665	
Ashland C	4,626	4,626	
Baldwin-Wallace C	4,755	5,181	
Belmont Tech C	660	750	150
Bethesda Hosp Sch of Nursing	2,150	2,619	
Bluffton C	3,960	4,320	
Borromeo C of Ohio	2,600	3,000	
Capital U	4,720	5,350	
Case Wstrn Reserve U	5,640	6,450	
Cedarville C	*	3,207	
Central Ohio Tech C	*	980	930
Central St U	1,035	1,290	966
Chatfield C	1,330	1,748	
Christ Hospital Sch of Nursing	1,637	2,103	468
Cincinnati Bible Sem	1,509	2,037	
Cincinnati C Mortuary Sci	*	3,280	
Cincinnati Tech C	1,194	1,194	520
Circleville Bible C	1,920	2,492	
Cleveland C of Jewish Studies	520	660	
Cleveland Inst of Art	3,180	4,000	
Cleveland Inst of Music	5,350	6,101	
C of Mt St. Joseph on the Ohio	3,296	3,776	
Columbus C Art & Des	3,574	4,140	
Columbus Tech Inst	*	935	990
Cuyahoga CC			
Western	585	1,020	765
Defiance C	4,090	4,070	
Denison U	5,990	6,670	
Edison St CC	*	900	810
Fairview Gen Hosp Sch of Nursing	735	870	
Findlay C	3,596	4,425	
Franklin U	*	2,100	
Gerber's Akron Bty Sch	*	1,515	
Heidelberg C	4,940	5,450	
Hiram C	5,237	5,865	
Hocking Tech C	699	699	699
Jefferson Tech C	420	585	260
John Carroll U	3,600	3,968	
Kenyon C	6,300	7,090	
Kettrng C of Med Arts	1,900	2,856	
Lorain Co CC	*	925	1,845
Lourdes C	1,600	1,700	
Malone C	3,934	4,306	
Mansfield Bus C: Marion	*	2,235	
Mansfield Gen Hosp Sch of Nur	*	1,435	1,000
Marietta C	5,100	5,850	
Marion Tech C	900	900	1,080
Mercy Sch of Nur	*	2,090	
Miami U			
Hamilton	*	1,860	2,000
Middletown	*	1,850	2,000
Oxford	*	2,090	2,000
Miami Valley Hosp Sch of Nur	2,261	2,564	1,320
Miami-Jacobs Jr C Bus	2,235	2,321	
Mt Union C	5,040	6,045	
Mt Vern Nazarene C	2,644	2,999	
Muskingum C	5,010	5,619	
Northwest Tech C	864	1,080	980
Notre Dame C of Ohio	2,824	3,250	
Oberlin C	6,874	7,750	
Ohio Diesel Tech Inst	3,000	3,100	
Ohio Dominican C	3,620	3,990	
Ohio Inst of Photography	3,168	3,240	
Ohio Northern U	4,125	4,710	
Ohio Sch of Brdcst Tech	*	4,740	
Ohio U	*	1,692	1,791
Belmont County	*	1,320	1,791
Zanesville	1,110	1,320	1,791
Ohio Wesleyan U	5,550	6,300	
Otterbein C	4,872	5,364	
Owens Tech C	744	840	744
Pontif C Josephinum	2,400	2,950	
Practical Nursing Sch Buckeye Hills Cr Ctr	*	1,245	

OHIO—Continued

	1981-82 Tuition and fees	1982-83 Tuition and fees	1982-83 Added out-of-state tuition
Providence Hospital Sch of Nursing	2,245	2,360	
St Alexis Hosp Sch Of Nursing	1,050	1,230	
St Eliz Hosp Med Ctr Sch of Nursing	1,000	1,200	648
St Thomas Hosp Med Ctr Sch of Nursing	*	2,250	
St Vincent Hosp Sch of Nursing	2,000	2,170	
Sandusky Sch of Prac Nursing	925	925	85
Shawnee St CC	*	900	75
Sinclair CC	630	630	315
Southern Ohio C	*	2,340	
Southern St CC	1,215	1,215	225
Stark Tech C	855	1,125	900
Technichron Voc Inst	3,142	3,700	
Terra Tech C	750	930	1,170
Tiffin U	2,160	2,500	
Tri Rivers-Marion Gen Hosp Sch Prac Nurs	*	1,600	
United Electronics Inst	3,724	4,065	
U of Akron	1,080	1,430	1,530
U of Dayton	3,340	3,910	
U of Steubenville	2,860	4,170	
U of Toledo	1,017	1,260	1,602
Urbana C	2,982	3,300	
Ursuline C	2,830	3,150	
Walsh C	2,784	3,628	
Washington Tech C	*	990	720
Wilberforce U	2,560	2,560	
Wilmington C	3,345	4,425	
Wittenberg U	4,688	6,266	
Wright State U	1,278	1,470	1,470
Western Ohio	1,228	1,311	1,470
Xavier U	3,700	4,150	
Youngstown St U	915	1,245	900

OKLAHOMA

	1981-82 Tuition and fees	1982-83 Tuition and fees	1982-83 Added out-of-state tuition
Bartlesville Wesleyan C	2,730	2,860	
Bethany Nazarene C	*	2,375	
Cameron U	475	480	780
Central St U	450	495	745
Claremore Jr C	*	401	615
Connors St C	348	378	612
East Central Okla St U	450	495	690
Eastern Okla St C	*	371	653
Flaming Rainbow U	*	2,120	
Gordon Cooper Area V-T Sch	*	550	
Hillsdale Free Will Baptist C	1,125	1,275	
Langston U	432	836	830
Midwest Christian C	1,200	1,360	
NE Okla A&M C	*	355	612
NW Okla St U	*	525	825
Okla Baptist U	2,100	2,505	100
Okla Christian C	1,950	2,200	
Okla St U	*	653	1,139
Tech Inst	5[illegible]2	502	862
Oral Roberts U	3,36[illegible]	3,610	
St Anthony Hosp Sch of Nursing	840	840	
Sayre Jr C	300	326	612
South Okla City Jr C	306	333	612
S'eastern Okla St U	460	470	743
S'western C of Christian Ministries	*	1,500	
S'western Okla State U	410	506	1,088
Tri Co Area V-T Sch	*	350	
Tulsa Jr C	330	370	412
U of Oklahoma	575	653	1,139
Health Sciences Ctr	555	689	1,320
U of Sci & Arts of Okla	*	485	740
U of Tulsa	2,760	3,270	
Virgil's Beauty C	900	1,250	
Western Okla St C	330	371	612

OREGON

	1981-82 Tuition and fees	1982-83 Tuition and fees	1982-83 Added out-of-state tuition
Bassist C	3,650	3,950	
Blue Mountain CC	468	540	1,620
Central Oregon CC	480	540	2,169
Chemeketa CC	540	540	1,470
Clatsop CC	396	576	1,656
Columbia Christian C	2,462	2,655	
Concordia C	2,980	3,640	
Court Reporting Inst	2,160	3,120	
George Fox C	4,160	4,980	
Judson Baptist C	3,150	3,600	
Lane CC	532	565	1,782
Lewis & Clark C	5,620	6,444	
Linfield C	4,030	5,030	
Linn-Benton CC	*	612	1,944
Marylhurst C for Lifelong Learning	*	3,825	
Merritt Davis C of Bus	3,045	3,045	
Modern Beauty C	1,694	2,040	
Mount Hood CC	555	585	2,345
Multnomah Sch of the Bible	2,760	2,990	
Northwest Christian C	3,000	3,340	
Oregon Polytech Inst	2,365	2,365	
Pacific NW C of Art	*	3,310	
Pacific U	5,000	5,505	
Phagans' Tigard Bty Sch	*	2,280	
Portland CC	473	540	2,385
Portland Paramed Ctr	*	3,200	
Reed C	6,400	7,160	
Sacred Heart General Hosp	675	900	
Southwestern Ore CC	450	540	1,080
Treasure Valley CC	570	570	570
Umpqua CC	576	612	2,100
U of Portland	3,990	4,920	
Warner Pacific C	3,375	3,915	
Western Baptist C	3,505	3,864	
Western States Chiropractic C	3,657	4,065	
Willamette U	4,934	5,580	

PENNSYLVANIA

	1981-82 Tuition and fees	1982-83 Tuition and fees	1982-83 Added out-of-state tuition
Acad of New Church	1,437	1,[illegible]	
Albert Einstein Med Ctr Sch of Nursing	1,631	2,465	
Albright C	4,800	5,725	
Allegheny C	4,950	5,835	
Allentown Bus Sch	[illegible]100	2,700	

PENNSYLVANIA—Continued

	1981-82 Tuition and fees	1982-83 Tuition and fees	1982-83 Added out-of-state tuition
Allentown C of St Francis de Sales	3,670	4,060	
Alliance C	*	3,060	
Altoona Hosp Sch of Nursing	*	1,390	
Alvernia C	2,160	2,200	
Antonelli Sch of Photography	2,628	3,170	
Armstrng Co Mem Hosp Sch of Radiologic Tech	300	300	
Art Inst of Pittsburgh	*	3,685	
Baptist Bible C	2,788	3,152	
Beaver C	4,970	5,520	
Berean Inst	1,095	1,090	
Bloomsburg St C	1,100	1,594	1,110
Bryn Mawr C	6,760	7,715	
Bryn Mawr Hosp Sch of Nursing	*	2,580	
Bucknell U	6,467	7,350	
Bucks County CC	672	892	2,576
Butler County CC	900	996	2,304
Cabrini C	3,740	4,120	
California St C	*	1,652	1,110
Cambria-Rowe Bus C	1,975	2,425	
Carlow C	4,294	4,790	
Carnegie-Mellon U	5,450	6,350	
Cedar Crest C	4,500	5,100	
Center for Degree Studies	*	1,600	
Central Pa Bus Sch	2,150	2,475	
Centre Bus Sch	*	2,535	
Chatham C	*	5,512	
Chestnut Hill Hospital Sch of Nursing	2,040	2,040	
Cheyney St C	550	1,640	1,110
Clarion St C	1,300	1,875	1,110
Venango	1,120	1,875	1,110
Clarissa Sch of Fash Design	2,550	2,800	
C Misericordia	*	3,565	
CC of Beaver County	750	1,040	2,460
Community Gen Hosp Sch of Rad Tech	*	100	
Conemaugh Vly Mem Hosp Sch of Nursing	*	2,927	
Crozer-Chester Ctr Rad Program	*	350	
Curtis Inst of Music	*	125	
Dean Inst of Tech	*	2,725	
Del Vly C, Sci & Agr	*	4,300	
Dickinson C	5,915	6,715	
Drexel U	4,384	5,038	
Duff's Business Inst	2,755	3,000	
Duquesne U	4,175	4,830	
E Stroudsbg St C	*	1,600	1,110
Eastern C	4,290	4,470	
Edinboro St C	1,100	1,630	1,110
Episcopal Hosp Sch of Nursing	1,818	2,825	
Franklin & Marshall C	5,650	6,550	
Geneva C	3,830	4,220	
Gettysburg C	5,300	6,000	
Greensburg Inst of Tech	2,615	2,998	
Grove City C	2,370	2,620	
Gwynedd Mercy C	3,000	3,450	
Harcum Jr C	2,770	3,100	
Harrisburg Area CC	375	708	1,480
Haverford C	7,230	8,080	
Holy Family C	2,600	3,300	
Hussian Sch of Art	2,110	2,410	
ICM Sch of Bus	3,430	3,880	
Immaculata C	2,800	3,040	
Indiana U of Pa	*	1,630	1,110
Jerrytone Beauty Sch	*	1,800	
Johnson Sch of Tech	*	1,545	
Juniata C	4,740	5,361	
Keystone Jr C	3,446	3,750	
King's C	3,150	4,100	
Kutztown St C	1,100	1,592	1,110
La Roche C	2,750	3,170	
La Salle C	3,700	4,150	
Lackawanna Jr C	*	2,370	
Lafayette C	6,000	7,025	
Lancaster Bible C	2,564	3,200	
Lancaster Gen Hosp Sch of Nursing	*	1,825	
Lebanon Valley C	4,790	4,790	
Lehigh County CC	1,020	1,040	2,460
Lehigh U	6,100	7,200	
Lincoln U	1,450	1,730	700
Lock Haven St C	1,100	1,602	1,110
Louise Suydam McClintic Sch of Nursing of St Marg Mem Hosp	1,365	2,000	
Lycoming C	4,280	4,980	
Lyon Sch of Bus	*	2,495	
Manor Jr C	2,760	3,050	
Mansfield St C	*	1,596	1,110
Marywood C	2,580	2,970	
McCarrie Schls of Health Sciences & Tech	*	3,500	
McKeesport Hosp Sch of Med Tech	*	1,110	
Mercy Hosp Sch of Nursing	1,675	1,800	
Mercyhurst C	3,667	4,312	
Messiah C	3,500	3,950	
Millersville St C	1,212	1,598	1,110
Montefiore Hosp Sch of Rad Tech	300	400	
Moore C of Art	4,000	4,375	
Moravian C	4,950	4,950	
Muhlenberg C	5,150	5,975	
Natl Sch of Hlth Tech	*	2,810	
Neumann C	3,075	3,302	
New Sch of Music	3,335	4,035	
Northampton Co Area CC	960	1,080	2,220
NE Christian Jr C	2,528	2,720	
Penn Tech Inst	*	2,780	
Pennco Tech Inst	2,681	2,925	
Penn Acad of Fine Arts	*	2,200	
Penn Inst of Tech	2,880	2,880	
Philadelphia C of Art	5,110	5,800	
Philadelphia C of Bible	2,930	3,380	
Philadelphia C of Performing Arts	4,560	5,250	

Continued on Following Page

Tuition

Continued from Preceding Page

PENNSYLVANIA—Continued

	1981-82 Tuition and fees	1982-83 Tuition and fees	1982-83 Added out-of-state tuition
Philadelphia C of Pharm & Science	4,000	4,400	
Textiles & Science	3,500	4,000	
Phila Printing Sch	4,020	4,410	
Pinebrook Jr C	2,200	2,770	
Pittsburgh Beauty Acad: Beaver Falls	*	2,016	
Point Park C	3,955	4,335	
Robert Morris C	2,460	2,580	
Robert Packer Hosp Sch of Nursing	1,970	2,040	
Rosedale Tech Inst	3,340	3,700	
Rosemont C	4,365	4,715	
St Agnes Med Ctr Sch of Nursing	*	1,850	2,119
St Francis C	3,810	3,910	
St Francis Gen Hosp Sch of Nursing	*	1,780	
St Joseph Hosp Sch of Nursing	*	2,380	
St Joseph's U	3,900	4,220	
St Vincent C	3,460	4,224	
Seton Hill C	3,600	4,260	
Shadyside Hosp	*	2,443	
Shenango Vly Commercial Inst	*	1,825	
Shippensburg St C	1,414	1,844	1,110
Slippery Rock St C	*	1,668	1,110
Somerset Comm Hosp Sch of Radiology	75	200	
Spring Garden C	*	3,950	
Susquehanna U	4,750	5,296	
Swarthmore C	5,818	6,250	
Technician Trnng Sch	3,050	3,050	
Temple U	*	2,616	2,184
Thiel C	3,862	4,941	
Thomas Jefferson U C of Allied Health Sci	5,000	5,500	
Tracey-Warner Sch	*	2,250	
Triangle Inst of Tech Greensburg	*	3,370	
United Wesleyan C	2,780	2,900	
U of Pennsylvania	6,900	8,000	
U of Scranton	3,300	3,670	
Ursinus C	4,650	5,150	
Villa Maria C	3,350	3,890	
Villanova U	4,300	5,150	
Wash & Jeff C	5,310	6,120	
Waynesburg C	4,350	4,760	
West Chester St C	1,200	1,604	1,110
Westminster C	4,376	4,900	
Westmoreland Co CC	692	836	936
Wheeler Sch	*	2,250	
Wilkes C	*	4,650	
Wilson C	4,650	5,418	
York Academy of Arts	2,028	2,208	
York C of Pa	2,598	2,796	

RHODE ISLAND

	1981-82 Tuition and fees	1982-83 Tuition and fees	1982-83 Added out-of-state tuition
Arthur Angelo Sch of Hair Design	*	2,350	
Barrington C	4,185	5,085	
Brown U	7,120	8,380	
Bryant C	3,475	3,750	
CC of Rhode Island	*	630	
John's Creative Sch of Cosmetology	*	2,350	
Johnson & Wales C	3,600	3,945	
New Eng Inst of Tech	3,240	3,750	
Ocean St Bus Inst	*	2,450	
Providence C	4,617	5,317	
Rhode Island Hosp Sch of Respiratory Therapy	975	1,125	
Rhode Island Sch of Design	*	6,700	
Rhode Island Sch of Electronics	*	4,200	
Rhode Island Trades Shops Sch	3,715	4,318	
Salve Regina: Newpt C	*	4,800	
U of Rhode Island	*	1,543	2,854
Warwick Acad of Beauty Culture	*	2,380	

SOUTH CAROLINA

	1981-82 Tuition and fees	1982-83 Tuition and fees	1982-83 Added out-of-state tuition
Aiken Tech C	*	525	225
Allen U	2,310	2,510	
Anderson C	2,220	2,520	
Beaufort Tech C	*	480	225
Central Wesleyan C	3,200	3,520	
Chesterfield-Marlboro Tech C	375	435	
Clinton Jr C	650	875	
Coker C	3,580	3,930	
C of Charleston	*	1,120	900
Columbia Bible C	2,382	2,605	
Columbia C	3,300	2,100	
Columbia Jr C of Bus	1,200	1,330	
Denmark Tech C	500	500	300
Erskine C	3,750	4,300	
Florence-Darlington Tech C	450	525	300
Francis Marion C	660	805	765
Furman U	3,882	4,284	
Greenville Tech C	*	380	380
Horry-Georgetown Technical C	*	450	420
Lander C	*	1,150	600
Limestone C	3,470	3,940	
Midlands Tech C	476	600	600
Morris C	*	2,402	
North Greenville C	2,217	2,450	
Piedmont Tech C	*	495	255
Presbyterian C	*	4,225	
Rutledge C	1,800	1,800	
Spartanburg	*	1,440	
So Carolina St C	*	810	810
Spartanbg Methodist C	2,300	2,500	
Sumter Area Tech C	*	450	324
Tri-County Tech C	407	480	470
Trident Tech C	380	450	380

SOUTH CAROLINA—Continued

	1981-82 Tuition and fees	1982-83 Tuition and fees	1982-83 Added out-of-state tuition
U of South Carolina	1,040	1,180	1,280
Coastal Carolina C	770	850	990
Salkehatchie	770	820	990
Spartanburg	770	850	990
Sumter	770	820	990
Union	*	820	990
Voorhees C	2,329	2,330	
Wofford C	3,945	4,295	

SOUTH DAKOTA

	1981-82 Tuition and fees	1982-83 Tuition and fees	1982-83 Added out-of-state tuition
Augustana C	4,117	4,680	
CC of N Central U Ctr	1,780	2,372	
Freeman Jr C	2,200	2,900	
Huron C	3,135	3,485	
Lake Area Voc-Tech Inst	*	975	
Mitchell Voc-Tech Sch	*	950	
Mount Marty C	3,370	3,925	
National C	3,300	3,675	
Pierre Sch of Prac Nursing	*	1,150	
Presentation C	2,520	3,380	
Rapid City Reg Hosp Sch of Nursing	1,200	1,565	893
Sioux Falls C	3,240	3,510	
Stewart Sch of Hairstyling Aberdeen	1,673	1,875	
Sioux Falls	1,825	2,055	
Yankton C	3,260	3,960	

TENNESSEE

	1981-82 Tuition and fees	1982-83 Tuition and fees	1982-83 Added out-of-state tuition
American Baptist C of ABT Sem	1,014	1,014	
Austin Peay St U	*	720	1,758
Belmont C	2,300	2,500	
Bethel C	1,980	2,175	
Bryan C	2,500	2,800	
Chattanooga St Tech CC	*	462	1,758
Christian Bros C	3,050	3,460	
Cleveland St CC	*	462	1,758
Columbia St CC	390	462	1,758
Cumberland Sch of Med Tech	2,250	3,350	
David Lipscomb C	2,205	2,295	
Draughon's Jr C of Business: Nashville	*	2,160	
Dyersburg St CC	*	462	1,758
Fisk U	*	4,900	
Free Will Bapt Bible C	1,600	1,670	
Freed-Hardeman C	2,450	2,700	
Jackson St CC	*	468	1,758
Johnson Bible C	1,280	1,440	
King C	3,125	3,360	
Knoxville Bus C	1,728	1,920	
Lambuth C	2,730	3,270	
Lee C	2,006	2,287	
LeMoyne-Owen C	1,860	2,300	
Lincoln Memorial U	2,060	2,250	
Maryville C	3,520	4,000	
Memphis Academy of Arts	2,430	2,730	
Memphis Area Voc-Tech Sch	*	18	
Memphis Sch of Commerce	1,850	2,160	
Middle Tenn Bty Sch	1,000	1,100	
Middle Tenn St U	*	720	1,758
Mid-South Bible C	*	2,330	
Milligan C	2,824	3,200	
Morristown C	*	1,903	
Motlow St CC	390	462	1,758
Nashville Auto Diesel C	3,695	4,295	
Roane St CC	*	462	1,758
Shelby St CC	*	465	1,758
Southern Missionary C	3,780	4,160	
Southwestern at Memphis	4,500	5,200	
State Tech Inst Knoxville	*	378	1,764
Tenn Inst of Electronics	1,856	2,474	
Tenn Sch of Beauty	1,200	1,200	
Tennessee St U	582	792	1,758
Tennessee Tech U	615	771	1,758
Tennessee Temple U	1,850	1,980	
Tomlinson C	1,710	1,910	
Trevecca Nazarene C	2,607	2,780	
Tri-Cities St Technical Inst	380	375	1,400
Tusculum C	*	3,400	
Union U	2,080	2,270	
U of the South	*	6,520	
U of Tennessee Chattanooga	*	798	1,758
Ctr for Hlth Sci	*	903	1,701
Knoxville	657	867	1,701
Martin	*	825	1,701
Vanderbilt U	5,420	6,230	
Volunteer St CC	*	462	1,758
Walters St CC	*	488	1,758
Wm R Moore Sch of Tech	290	675	

TEXAS

	1981-82 Tuition and fees	1982-83 Tuition and fees	1982-83 Added out-of-state tuition
Abilene Christian U	2,250	2,820	
Alvin CC	*	180	390
Amarillo C	170	255	414
American Tech U	1,800	1,930	
Angelina C	252	252	280
Angelo St U	400	430	1,080
Audio & Joice Sch of Hair Design	1,140	1,680	
Austin C	3,600	4,035	
Austin CC	312	438	810
Baldwin Beauty Sch	*	1,290	
Long Point	*	1,290	
Barrow Beauty Sch	*	945	
Bauder Fashion C	*	3,710	
Baylor U	2,522	2,844	
Bee County C	222	222	970

TEXAS—Continued

	1981-82 Tuition and fees	1982-83 Tuition and fees	1982-83 Added out-of-state tuition
Brazosport C	130	120	380
Cedar Vly C	240	240	1,010
Cntrl Plains Reg Hosp Sch of Radiologic Tech	*	80	
Central Texas C	234	280	420
Clarendon C	310	310	250
C of the Mainland	135	135	300
Concordia Lutheran C	1,950	2,200	
Cooke Co C	250	250	225
Corpus Christi St U	396	384	1,080
Dallas Baptist C	1,800	2,840	
Dallas Christ C	1,350	1,480	
Del Mar C	230	230	400
Durham Business C	2,195	2,195	
East Texas Baptist C	1,770	1,995	
Eastfield C	240	240	1,010
Fashion Art Inst Dallas	*	4,010	
Galveston C	*	120	280
Gary's Bty C	*	895	
Grayson Co C	210	210	280
Gulf-Coast Bible C	2,212	2,512	
Hardin-Simmons U	2,460	2,760	
Henderson Co Jr C	*	168	312
Hendrick Mem Hosp Sch of Nursing	*	425	
Hill Jr C	500	500	500
Houston Baptist U	2,441	3,348	
Howard C at Big Spring	250	250	250
Howard Payne U	1,800	2,100	
Huston-Tillotson C	2,190	2,412	
Incarnate Word C	3,021	3,160	
Jacksonville C	1,320	1,550	
Kilgore C	*	180	430
Killeen Bty C	*	1,035	
Lamar U	451	450	1,080
Lee C	150	184	280
LeTourneau C	2,650	3,536	
Lon Morris C	1,900	2,580	
Lubbock Christian C	2,250	2,592	
McLennan CC	240	240	552
McMurry C	2,410	2,750	
Midwestern St U	*	480	1,075
Mountain View C	*	240	1,010
Mr Tomie's Cosmetology	810	1,250	
Navarro C	380	392	980
North Lake C	*	240	1,010
North Texas St U	*	450	1,050
Odessa C	*	305	400
Ogle Sch of Hair Design	*	1,350	
Our Lady of Lake U	2,800	3,074	
Panola Jr C	180	180	280
Rice U	3,400	3,700	
Richland C	240	240	1,010
St Edward's U	*	3,100	
St Mary's U, San Antonio	*	3,450	
St Philip's C	*	214	324
Sam Houston St U	332	460	1,080
San Antonio C	160	214	320
San Jacinto C Central Campus	160	170	390
North Campus	160	170	390
South Plains C	300	300	250
Southern Bible C	2,025	1,910	
Southern Meth U	4,910	5,650	
SW Inst of Fash Merch & Des	*	2,525	
Southwest Texas St U	450	450	1,080
SW Adventist C	4,140	4,510	
Southwestern Jr C	*	1,652	
Southwestern U	3,000	3,500	
Stephen F Austin St U	480	500	1,280
Sul Ross St U	*	372	1,224
Tarrant Co Jr C	*	140	1,080
Temple Jr C	300	275	250
Texas A&I U	*	375	1,080
Texas A&M U	450	480	1,080
Galveston	372	372	984
Texas Christian U	3,300	4,110	
Texas C of Medical & Dental Assistants	*	2,525	
Texas Inst	3,350	3,500	
Texas Lutheran C	2,550	2,800	
Texas Southmost C	256	256	852
Texas St Tech Inst Amarillo	340	348	720
Waco Campus	240	348	720
Texas Tech U	432	432	1,100
Texas Wesleyan C	2,800	3,000	
Texas Woman's U	*	380	1,080
Trinity U	3,627	4,021	
Tyler Jr C	*	120	750
U of Dallas	*	3,600	
U of Houston	*	420	1,080
Clear Lake Co	408	420	1,080
Downtown C	*	420	1,080
Victoria	240	312	1,080
U of St Thomas	2,700	3,000	
U of Texas Arlington	*	440	1,080
Austin	420	420	1,080
Dallas	*	450	1,080
El Paso	380	396	1,080
Health Sci Ctr, Dallas	*	240	1,080
Med Branch, Galveston	*	215	1,080
Permian Basin	*	350	1,078
San Antonio	420	400	1,080
Sch of Nursing Galveston	*	132	
Vernon Regional Jr C	220	287	1,080
Victoria C	160	150	370
West Texas St U	402	480	1,080
Western Texas C	250	250	280
Wharton County Jr C	250	283	1,437

UTAH

	1981-82 Tuition and fees	1982-83 Tuition and fees	1982-83 Added out-of-state tuition
Bridgrlnd Area Voc Ctr	255	255	383
Brigham Young U	1,090	1,220	
C of Eastern Utah	*	651	1,038
Dixie C	552	636	1,038
Hollywood Beauty C	630	660	
Sevier Valley Tech	*	380	841
Snow C	630	665	1,048
Stevens Henager C	*	2,502	
U of Utah	*	980	1,767
Utah St U	780	849	1,515
Utah Tech C Provo	570	627	1,038
Weber St C	*	702	1,293
Westminster C	3,400	3,280	

VERMONT

	1981-82 Tuition and fees	1982-83 Tuition and fees	1982-83 Added out-of-state tuition
Bennington C	8,260	9,620	
Burlington C	*	3,460	
Castleton St C	1,407	1,650	1,980
Champlain C	3,250	3,595	
C of St Joseph the Provider	*	3,330	
CC of Vermont	*	900	900
Green Mountain C	4,680	5,255	
Johnson St C	*	1,625	1,980
Lyndon St C	1,239	1,609	1,980
Marlboro C	5,890	6,900	
St Michael's C	4,680	5,505	
Sch for Intl Training	5,025	5,600	
Southern Vermont C	3,000	3,450	
Sterling Inst	*	5,000	
Thompson Sch Prac Nur	*	832	300
Trinity C	3,640	4,205	
U of Vermont	*	2,466	3,550
Vermont Tech C	*	1,914	1,520

VIRGINIA

	1981-82 Tuition and fees	1982-83 Tuition and fees	1982-83 Added out-of-state tuition
Averett C	*	2,810	
Blue Ridge CC	346	558	1,788
Bluefield C	1,760	1,990	
Bridgewater C	3,650	4,080	
Central Virginia CC	342	558	1,788
Christopher Newport C	1,010	1,235	390
Clinch Vly C of U of Va	750	1,064	504
C of William & Mary	1,334	1,374	2,434
Control Data Inst	*	4,950	
Dabney Lancaster CC	342	562	1,788
Danville CC	384	558	1,788
Eastern Mennonite C	3,831	4,137	
Eastern Shore CC	347	563	1,788
Emory & Henry C	2,874	3,300	
George Mason U	1,008	1,176	1,056
Germanna CC	384	582	1,788
Hampden-Sydney C	5,040	5,875	
Hampton Inst	*	3,215	
Hollins C	5,520	6,325	
JS Reynolds CC	342	562	1,788
James Madison U	1,210	1,506	840
John Tyler CC	342	558	1,788
Liberty Baptist C	1,870	2,270	
Longwood C	1,390	1,565	630
Lynchburg C	4,200	4,900	
Mary Baldwin C	4,295	4,735	
Mary Washington C	958	1,048	1,132
Marymount C of Va	*	4,200	
Morven Park Int'l Equestrian Inst	4,874	4,874	
Mountain Empire CC	342	558	1,788
New River CC	347	563	1,788
Norfolk St U	*	812	615
Northern Virginia CC	384	558	1,788
Old Dominion U	1,066	1,114	980
Phillips Bus C	*	1,600	
Piedmont Va CC	384	558	1,788
Portsmouth Gen Hosp Sch of Nursing	1,355	1,355	
Portsmth Sch, Lab Tech	125	400	
Princess Anne Bus C	*	2,115	
Radford U	1,035	1,254	750
Randolph-Macon C	4,450	5,000	
Rand-Macon Woman's C	5,100	5,900	
Rappahannock CC	*	562	1,788
Richard Bland C	*	790	1,170
Richmond Public Sch of Practical Nursing	300	1,000	
Roanoke C	4,100	4,750	
Roanoke Mem Hosp Sch of Nursing	718	1,045	705
Shenandoah C and Conservatory of Music	3,200	4,190	
Southern Seminary Jr C	3,950	3,975	
Southside Virginia CC	346	558	1,788
Southwest Va CC	342	563	1,788
Staunton Sch, Cosmet	*	1,300	
Sweet Briar C	6,010	6,760	
Thomas Nelson CC	342	558	1,788
Tidewater CC	342	558	1,788
U of Richmond	4,845	5,525	
U of Virginia	1,110	1,350	1,926
Va Commonwealth U	*	1,216	970
Virginia Intermont C	3,050	3,350	
Virginia Military Inst	780	2,095	1,830
Va Poly Inst & St U	*	1,281	1,245
Virginia St U	979	1,303	805
Virginia Union U	*	2,910	
Virginia Wesleyan C	3,700	4,100	
Virginia Western CC	342	558	1,788
Washngtn Bus Sch No Va	3,600	4,200	
Washington & Lee U	4,855	5,400	
Winchester Mem Hos Sch of Radiologic Tech	1,500	1,500	
Wytheville CC	342	558	1,788

WASHINGTON

	1981-82 Tuition and fees	1982-83 Tuition and fees	1982-83 Added out-of-state tuition
Bellevue CC	465	519	1,518
Big Bend CC	471	519	1,518
Central Washington U	735	942	2,280
Centralia C	480	513	1,518
City C	*	2,340	
Clark C	*	519	1,518
Cornish Inst	3,198	3,750	
Eastern Wash U	735	942	2,280
Edmonds CC	390	519	1,518
Everett CC	390	519	1,518
Evergreen St C	735	942	2,280
Fort Steilacoom CC	450	513	1,518
Gonzaga U	4,040	4,700	
Grays Harbor C	402	519	1,518
Green River CC	471	519	1,518
Griffin C	1,880	2,307	
Heritage C	*	2,850	
Highline CC	*	519	1,518
Karen's Beauty Sch	*	1,775	
Lower Columbia C	507	519	1,518
Lutheran Bible Inst	2,007	2,208	
McDonald's Sch, Cosmet	*	1,100	
Modern Bus C	3,045	3,345	
North Seattle CC	*	506	1,518
Northwest C	*	2,745	
Olympia Tech CC	460	519	1,518
Olympic C	465	519	1,518
Pacific Lutheran U	4,380	4,850	
Peninsula C	308	513	1,518
Puget Sound C, Bible	2,000	2,310	
Ron Bailie Sch, Brdcst	4,490	4,590	
St Martin's C	4,312	4,422	

WASHINGTON—Continued

	1981-82 Tuition and fees	1982-83 Tuition and fees	1982-83 Added out-of-state tuition
Seattle Central CC	*	506	1,518
Seattle Pacific U	4,002	4,463	
Seattle South CC	*	506	1,518
Seattle U	4,275	4,725	
Shoreline CC	455	517	1,518
Skagit Valley C	471	519	1,518
Spokane CC	*	519	1,518
Spokane Falls CC	*	519	1,518
Tacoma CC	461	509	1,518
Tumor Inst,Swedish Hosp Sch Rad Ther Tech	*	110	
U of Puget Sound	4,800	5,480	
U of Washington	918	1,176	2,079
Walla Walla C	4,695	5,169	
Walla Walla CC	471	519	1,518
Washington St U	*	1,176	2,080
Wenatchee Valley C	471	525	1,518
Western Washington U	867	942	2,268
Whatcom CC	*	506	1,518
Whitman C	5,150	5,850	
Whitworth C	4,683	5,235	
Yakima Bus C	3,045	3,345	
Yakima Valley CC	471	519	1,518

WEST VIRGINIA

	1981-82 Tuition and fees	1982-83 Tuition and fees	1982-83 Added out-of-state tuition
Alderson-Broaddus C	3,460	3,970	
Appalachian Bible C	2,000	2,150	
Beckley C	864	912	
Bethany C	*	5,800	
Concord C	368	574	1,200
Davis & Elkins C	4,030	4,415	
Fairmont St C	*	590	1,200
Glenville St C	364	564	1,200
Marion Co Voc-Tech Ctr	*	700	
Marshall U	*	650	1,330
Ohio Valley C	2,074	2,226	
Parkersburg CC	336	440	1,200
Potomac St C of W Va	400	602	1,200
Salem C	3,370	3,710	
Shepherd C	600	576	1,200
U of Charleston	2,700	3,350	
West Liberty St C	*	604	1,200
W Va Career C, Fairmont	*	2,495	
W Va Inst of Tech	*	594	1,200
W Va Northern CC	288	440	1,200
W Va St C	*	600	1,200
West Virginia U	628	840	1,520
W Va Wesleyan C	3,250	3,986	
Wheeling C	3,800	4,350	

WISCONSIN

	1981-82 Tuition and fees	1982-83 Tuition and fees	1982-83 Added out-of-state tuition
Acme Inst of Tech Hales Corners	3,709	3,465	
Manitowoc	3,709	3,465	
Alverno C	3,400	3,850	
Beloit C	5,765	6,586	
Blackhawk Tech Inst	540	600	2,295
Cardinal Stritch C	3,200	3,600	
Carroll C	5,010	5,330	
Carthage C	4,211	4,601	
Concordia C	2,950	3,300	
District One Tech Inst	540	600	2,295
Edgewood C	*	3,450	
Fox Valley Tech Inst	989	989	2,295
Holy Redeemer C	1,740	2,250	
Janesville Acad Bty Cul	*	1,775	
Lakeland C	3,890	4,455	
Lakeshore Tech Inst	380	465	2,295
Lawrence U	5,883	6,675	
Madison Area Tech C	*	660	1,296
Madison Business C	1,925	2,040	
Marian C, Fond du Lac	*	3,210	
Marquette U	4,010	4,450	
Milton C	3,300	4,030	
Milwauk Area Tech C	540	667	1,296
Milw Co Gen Hosp,Nurs	*	1,910	
Milwauk Inst of Art&Des	*	2,150	
Milwaukee Sch of Engr	4,110	4,605	
Milwauk Stratton C	*	3,750	
Moraine Park Tech Inst	*	600	2,295
Mount Mary C	2,900	3,350	
Mount Senario C	3,520	3,520	
Nicolet C & Tech Inst	*	695	1,296
North Central Tech Inst	431	431	2,259
Northland C	3,785	4,370	
Patricia Stevens Career C	3,680	3,990	
Ripon C	5,400	6,020	
St Francis de Sales C	1,465	1,465	
St Norbert C	3,970	4,495	
Silver Lake C	3,200	3,400	
St C of Bty Cul,Waus	*	2,680	
Wauwatosa	*	2,680	
Trans Amer Sch of Broadcasting	3,400	3,400	
Viterbo C	3,380	3,780	
Western Wis Tech Inst	431	600	2,295
Wis C of Cosmetology	1,400	1,650	
Wis Conserv of Mus	3,160	3,910	
Wisconsin Lutheran C	*	3,080	

WYOMING

	1981-82 Tuition and fees	1982-83 Tuition and fees	1982-83 Added out-of-state tuition
Casper C	380	350	900
Central Wyoming C	312	338	
Eastern Wyoming C	330	330	200
Laramie Co CC	385	401	522
Northwest CC	380	400	460
Sheridan C	408	440	702
U of Wyoming	582	616	1,460
Western Wyoming CC	308	347	51
Wyo Tech Inst	3,790	3,990	

CANADA

	1981-82 Tuition and fees	1982-83 Tuition and fees	1982-83 Added out-of-state tuition
McGill U	4,120	4,510	

GUAM

	1981-82 Tuition and fees	1982-83 Tuition and fees	1982-83 Added out-of-state tuition
U of Guam	*	509	538

PUERTO RICO

	1981-82 Tuition and fees	1982-83 Tuition and fees	1982-83 Added out-of-state tuition
Amer C of P R	1,700	1,300	
Antillian C	*	1,882	
Caribbean U C	1,410	1,425	
Conser of Music of P R	210	210	
Elec Data Proc. C of P R	1,380	1,382	
Inst Tec Comercl Jr C	*	1,320	
Inter Amer U of P R Regional Colleges	1,443	1,380	
Puerto Rico Jr C	1,365	1,365	
U of P R, Rio Piedras	200	580	
U of Sacred Heart	1,500	1,584	

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News Summary

Articles on inside pages

*The next issue
of The Chronicle,
dated September 1,
will be mailed on August 26.*

Legislation withholding federal aid from young men who fail to register for the draft is virtually certain to be enacted. Story on Page 6.

Eligibility criteria for Pell Grants would become more stringent under regulations proposed last week. Story on Page 6.

Enrollment at public two-year colleges will increase 4 per cent this fall, according to preliminary projections. Story on Page 3.

Five administrators at Stockton State College have submitted their resignations in protest over the trustees' failure to hire a woman appointed to the position of head librarian. Story on Page 12.

Renewed interest in politics was evident at the annual meeting of the United States Student Association. Story on Page 3.

More than 40 per cent of the top corporate executives in a recent survey received their graduate degrees from universities in the Ivy League or the Big 10. Story on Page 2.

The director of a federal program to advance education equity for women has filed complaints charging "political intrusion" in the Department of Education. Story on Page 8.

Many Polish students, fearing further political oppression, will probably not return to the universities when classes resume in the fall. Story on Page 13.

ALSO IN THIS ISSUE

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A Big Basketball Power Drops the Sport, Blaming Abuses by Alumni 'Boosters'

Action by U. of San Francisco follows revelation of payment to player for nonexistent job

SAN FRANCISCO

The University of San Francisco has abolished its men's intercollegiate program in basketball because, its president said, misconduct on the part of alumni "boosters" and players threatened the institution's "integrity and reputation."

The president, the Rev. John Lo Schiavo, said the university's board of trustees had voted to drop the program because U.S.F. "cannot afford to pay the price the basketball program is imposing on us."

The decision ended 58 years of intercollegiate basketball at the University of San Francisco. In many of those years, its team ranked among the best in the country.

Father Lo Schiavo said the decision had been made because the university felt it could no longer control supporters of the basketball team who were engaging in illegal practices. He said there were people associated with the program "determined to break the rules, presumably because they are convinced that the university cannot stay within the rules and maintain an effective, competitive program."

The decision followed the revelation that a star player on the team had been paid by an alumnus for a job he had not performed.

The player, Quintin Dailey, was an All-American selection this past year who decided to forgo his senior year at San Francisco to play professional basketball. He was the top pick of the Chicago Bulls in the National Basketball Association draft last spring.

There were also allegations that other team boosters had paid the high-school tuition bill of one and possibly two athletes

Continued on Page 11, Column 1

The text of a statement by the Rev. John Lo Schiavo, president of the University of San Francisco, appears on Page 12.

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WIDE WORLD

The U. of San Francisco's integrity was threatened by repeated scandals in its basketball program, says President John Lo Schiavo.

NCAA Names Independent Panel to Find 'Practical Solutions' to Sports Problems

By N. SCOTT VANCE

The National Collegiate Athletic Association, citing frustration among college and university administrators and cynicism among sports fans, has formed an independent committee to suggest solutions to the problems plaguing intercollegiate athletics.

The N.C.A.A. gave the 16-member committee—made up of college presidents, coaches, athletic directors, and faculty members—free rein to probe abuses in college athletics and come up with "practical, workable solutions" to those problems. The panel will meet four times, starting in September, and will consult presidents and athletics administrators at Division I institutions for suggested areas of inquiry.

The N.C.A.A.'s council created the panel "to bring together a group of esteemed individuals, combining the highest standing in higher education with extensive knowledge of intercollegiate athletics, to examine in detail the serious problems affecting college athletics today," according to a statement by James Frank, president of the association.

Executive Director Appointed

John P. Schaefer, former president of the University of Arizona, was appointed executive director of the committee. He said the group would decide at its first meeting which problems to investigate. Mr. Schaefer is now president of the Research Corporation, a foundation based in New York.

"The basic issue is how to maintain the integrity of universities," Mr. Schaefer said. "We're not going to sit down and determine what all the problems are. That's been studied to death. We're going to look for practical ways to relieve the pressure on players and coaches to play the game the way it shouldn't be played."

As an example of what the committee might decide to examine, Mr. Schaefer cited the "really impossible position" faced by coaches of top-flight programs. "We let them know they've got to win to retain their jobs," he said, "but then tell them they've also got to play the game honestly. The temptation for some to cut corners if things aren't going well can be overwhelming."

One solution to that problem, Mr. Schaefer said, would be to guarantee coaches job security.

Ted Tow, a spokesman for the N.C.A.A., said he hoped the committee's recommendations would relieve the "increasing despair" among college and university presidents over trying to maintain the integrity of their institutions' athletic programs.

The announcement of the new commit-

Continued on Page 11, Column 1

MARGINALIA

And here, dear readers, are the final winners in the Summer Marginalia Contest—our search for funny and sad, rude and nice job-rejection letters received (or conceived) by our readers. *The Chronicle*, as it does every year at this time, will take the next two weeks off, after which it (and we) will be back with our regular fare. Thanks to all who entered the 1982 competition; winners should receive their prizes soon. —C.G.

■

DEAR CANDIDATE:

In response to your application for the position of Reference Librarian that we advertised, we have to tell you that after we placed the ad, our budget was cut again, and we really do not have enough money to pay for the position.

As you can imagine, our salaries are quite low anyway.

■

From a fast-food chain:

DEAR MS. ——:

When I see a resume like yours I get awfully annoyed with recessions, cutbacks, hiring freezes, and letters that begin, "I regret to inform you . . ."

I suspect you do too, so please take a good friend to the nearest Arby's and enjoy a delicious sandwich, compliments of Arby's Inc.

■

DEAR DR. ——:

No.

■

"I'm only 95-per-cent certain that this *is* a rejection letter," writes the entrant who sent us the following:

DEAR ——:

The Linguistics Search Committee has now compiled its short list and made its recommendations to the Provost. Inasmuch as the search is not likely to go into a third year, we are closing our files, returning offprints, and expressing our thanks to you and the other highly qualified candidates.

■

DEAR ——:

Regarding your application for the position in the English department at Y College, we have hired a better-qualified applicant.

■

Z UNIVERSITY IS PLEASED
TO ANNOUNCE THE APPOINTMENT OF
WILLIAM JONES
AS VICE-PRESIDENT
FOR ACADEMIC AFFAIRS

■

From a job-search consulting firm —expressing, perhaps, more truth than the letter-writer intended:

DEAR ——:

Thank you for your resume. We will try our best to help you and we will deep your resume in our files.

In Brief

Education Ruled Not Part of Property Settlement

A state appeals court in California has reversed its earlier decision that the ex-wife of a physician was entitled to a share of his future earnings because she had helped put him through medical school.

In January, the court ruled that Janet Sullivan was entitled to part of the income of her former husband, Mark Sullivan, a urologist.

However, Dr. Sullivan's lawyers asked the court to reconsider the ruling. In an opinion issued last week it said it had been wrong to assume that Dr. Sullivan's education could be considered part of a property settlement.

Ms. Sullivan's lawyer said the new ruling would be appealed.

33 Iranians Arrested After Clash at SMU

At least 4 Iranians were injured and 33 were arrested in a violent clash at Southern Methodist University between groups supporting and opposing the Islamic government of the Ayatollah Ruhollah Khomeini. The disturbances began when about 50 pro-Khomeini Iranians protested outside a room in the university's student center where a group of anti-Khomeini students were meeting.

All of those arrested were from the pro-Khomeini group. A police spokesman said only three of them were students.

Officials of the Immigration and Naturalization Service said they were reviewing the files of those arrested and would begin deportation proceedings against any who were found to be in the country illegally.

Job Offers to Graduates Said to Fall 18 Pct.

This year's college graduates received 18 per cent fewer job offers than did last year's, according to a survey by the College Placement Council.

The recipients of bachelor's degrees at a sample of 161 colleges and universities received a total of 51,290 offers of employment this year, compared with 62,835 last year. The council's data do not include offers of teaching jobs.

Most of the decrease occurred in engineering, according to Judith Kayser, the council's manager of statistical services. It reflects a return to normal after "a couple of peak years," she said.

Reasons for the decline are varied, Ms. Kayser added. Among other things, individual students received fewer offers.

Graduates with a bachelor's degree in petroleum engineering received the highest average salary offer—$30,468 a year, the council reported. Humanities graduates received the lowest average offer—$15,396 a year.

University Sued in Dispute over Women's Studies

Faculty members in the department of women's studies at California State University at Long Beach have sued the university, charging that the cancellation of some classes in the department violated their right to freedom of speech and constituted discrimination against feminists.

Several courses, including one called "Women and Their Bodies," were canceled after a group of evangelical Christians and conservative state legislators charged that some promoted lesbianism.

The suit was filed by the American Civil Liberties Union on behalf of 13 members of the department and 4 members of its advisory committee.

The board of trustees of California State University has established a committee on academic freedom to investigate the women's-studies controversy at Long Beach.

U. of Maine to Discontinue Investments in South Africa

Trustees of the University of Maine have agreed to get rid of some $3.1-million in common stock in companies doing business in South Africa.

The decision came after Douglas M. Allen, chairman of the philosophy department and head of a special committee studying the South African situation, told the trustees that "the University of Maine should not profit from this system of institionalized and legalized racism, which is unique in the world."

Princeton Library Sets Fees for Outside Users

The Firestone Library at Princeton University has abandoned its policy of permitting free access to its stacks to people not affiliated with the university. Citing rising costs and increasing theft, library officials last week started granting access only to holders of special cards, which cost $20 a month or $75 a year.

Florida State Investigates Charges Against Professor

Officials at Florida State University last week began investigating charges that a history professor, Edward Wynot, inflated the grades of student athletes and helped them cheat on tests.

An earlier investigation by the history department found that Mr. Wynot had awarded A's to all 42 student athletes in his upper-level courses between the fall of 1980 and the fall of 1981, said David Ammerman, vice-chairman of the department. No evidence has been found that the athletic department or any other faculty members were involved, he said.

Mr. Wynot has also been accused by students of allowing a tutor to provide athletes with answers to examination questions before the tests were administered. Augustus B. Turnbull, vice-president for academic affairs, last week ordered an investigation of the students' charges and of the evidence of grade inflation.

Hurt in Initiation, He Sues Fraternity for $2-Million

A student at West Virginia University who was injured in an initiation ceremony has sued the Sigma Phi Epsilon fraternity for $2-million.

John E. Payne charged that during a fraternity-initiation rite he was blindfolded and, "without his prior knowledge," exposed to a flammable liquid that was meant to ignite and burn the fraternity's Greek letters on his chest.

Mr. Payne's lawsuit says a pan being used in the ceremony burst into flames after a match was struck nearby. The fraternity brother who was holding the pan dropped it and, the suit claims, it "inadvertently" landed on Mr. Payne's chest.

He suffered burns on 35 per cent of his body, his lawyer said.

Blaze Destroys Textbooks on Wisconsin Campus

Tens of thousands of textbooks ordered for the fall term at the University of Wisconsin at Oshkosh were destroyed in a fire that caused major damage to a building housing the campus bookstore.

University officials said the bookstore, as well as residential and dining facilities in the building, would be relocated until the damage is repaired.

According to a spokesman for the university, faculty members acted "swiftly and laudably" to prepare new book lists for the fall semester.

Ex-Student Gets Jail Term for Falsifying Grades

A former student at California State University at Sacramento has been sentenced to six months in jail for falsifying his academic records to gain admission to the Navy's Officer Candidate School in Pensacola, Fla.

Greg K. Baker pleaded no contest to the charge that he falsified his transcripts in 1980, admitting he had entered the university registrar's office to change his grades in speech pathology, court documents showed.

The Navy later discharged Mr. Baker for fraudulent enlistment, officials said.

Fire at UCLA Injures 19, Forces Evacuation

A fire in a storage shed outside a chemistry building at the University of California at Los Angeles injured 19 people and forced the evacuation of three classroom buildings when a vapor cloud seeped into a ventilation system.

The fire was apparently caused by nitric and sulfuric acids that had leaked from containers in the storage building. Nine fire fighters, five security guards, three policemen, and two paramedics were treated for toxic burns. Three of those treated were hospitalized.

Experimenter Is Burned in Laboratory Explosion

Four people were injured and several walls buckled in an explosion in a chemical-engineering building at the University of California at Berkeley during a experiment by a graduate student.

The student, Robert Moore, was hospitalized with severe burns after the explosion in a basement laboratory. Three university employees in adjoining rooms suffered cuts and bruises.

'Charitable Statistics' Reported by National Center

The National Center for Charitable Statistics has announced a program to expand the collection of data on charitable organizations. The center, which has offices in Alexandria, Va., said it had arranged for access to data filed with the Internal Revenue Service by nearly 400,000 charitable organizations.

The center is sponsored by the Council on Foundations, Independent Sector, the National Information Bureau, and United Way of America.

Corrections

Following are corrections of data on tuition and fees that appeared in *The Chronicle*, August 4:

	1981-82 Tuition and fees	1982-83 Tuition and fees
MICHIGAN		
Adrian C	4,686	4,974
Alma C	4,894	5,629
Andrews U	4,485	4,950
Aquinas C	4,016	4,498
Baker JC of Bus	1,995	2,220
Bronson Meth Hosp Sch of Nursing	1,760	2,128
Calvin C	3,480	3,950
Ctr for Creative Studies	3,341	3,936
Central Mich U	1,200	1,340

Ivy League and Big 10 Dominate Lists of Corporate Executives' Alma Maters

NEW YORK

Top business executives in the United States are most likely to have degrees from a university in either the Ivy League or the Big 10, Standard & Poor's Corporation reported last week.

Ivy League institutions awarded 15 per cent of the undergraduate degrees and nearly 29 per cent of the graduate degrees reported in the Standard & Poor's 1982 survey of business executives' education. Big 10 institutions accounted for 13 per cent of the executives' undergraduate degrees and for 14 per cent of the graduate degrees.

Massachusetts led all other states. Its colleges and universities accounted for 9,427 degrees. New York institutions were second with 9,347, followed by Pennsylvania with 5,710, Illinois with 5,153, and California with 4,202.

The survey was based on biographies of more than 67,000 officers and directors of some 38,000 businesses. It found that 499 colleges and universities had granted 52,387 undergraduate and 23,959 graduate degrees to those executives.

The top 12 institutions are:

Graduate degrees	
1. Harvard U.	3,849
2. New York U.	1,370
3. Columbia U.	1,223
4. U. of Michigan	794
5. U. of Pennsylvania	742
6. U. of Chicago	695
7. Northwestern U.	649
8. Mass. Inst. of Technology	566
9. Stanford U.	551
10. Rutgers U.	510
11. U. of Wisconsin	474
12. Yale U.	419
Undergraduate degrees	
1. Yale U.	1,679
2. Harvard U.	1,366
3. City U. of New York	1,258
4. Princeton U.	1,199
5. New York U.	1,093
6. U. of Pennsylvania	1,052
7. U. of Michigan	1,014
8. U. of Wisconsin	968
9. U. of Illinois	945
10. Northwestern U.	857
11. U. of Minnesota	827
12. Cornell U.	825

Copies of the report listing the results for all 499 institutions are available at $15 each from the Public Relations Department, Standard & Poor's Corporation, 25 Broadway, New York 10004.

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News Summary

Articles on inside pages

Whether it's "swab summer" or the regular academic year, the order of the day at the Coast Guard Academy is discipline. Story on Page 6.

A listing of average salaries for faculty members at more than 2,500 U.S. colleges begins on Page 12.

Law schools may set religious criteria for admission under a new accreditation standard approved by the American Bar Association. Story on Page 9.

Federal anti-sex-bias laws apply to colleges that receive no federal aid except through student grants and loans, an appeals court has ruled. Story on Page 19.

Foreign students could not take up permanent residence in this country immediately after graduation under a bill recently passed by the Senate. Story on Page 19.

Young men who do not register for the draft would forfeit federal student aid under a bill awaiting the President's signature. Story on Page 19.

Tenured faculty members should be exempt from proposed legislation that would abolish mandatory retirement, according to a leading economist. Story on Page 23.

New books due out this fall feature scholars' views on nuclear arms and creationism. Story on Page 31.

Polish authorities have released most intellectuals and academics interned after the imposition of martial law. Story on Page 29.

The new president of the American University of Beirut left for Lebanon last week, hopeful that classes would start on schedule in October. Story on Page 29.

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WHERE HAS THE SUMMER GONE?

PHOTOGRAPH FOR THE CHRONICLE BY DRAKE HOKANSON

Members of a residence-hall staff lend a hand as students arrive at the University of Iowa.

Colleges Open with Big Backlog in Aid Offices

Processing is weeks behind at many institutions

By JANET HOOK

"All financial-aid telephone lines are busy," says a recorded message at Purdue University. "We have experienced delays and backlogs due to late federal decisions and changes by the state. We appreciate patience as we work through the backlogs."

The message tells the story of many a student-aid office these days, but patience has worn thin and anxiety is running high on many campuses as officials rush to make final financial arrangements for the fall semester.

In the meantime, students wait. And wait. And call their college financial-aid offices frequently to find out when they will receive their awards.

Registering Without Money

"Students keep asking us, 'When?' and we keep telling them, 'In a couple of weeks,' " says Thomas M. Rutter, director of financial aid at the University of California at San Diego.

With the fall semester already under way at many colleges, campus officials still have not been told how much federal money they will have to spend this year under some student-aid programs. Because the Department of Education was late issuing key rules this year, the processing of applications is running weeks behind schedule at many institutions. As a result, substantial numbers of students will have to register for classes without their grant and loan checks in hand.

Some Students Overreacted

College officials say the delays have compounded the problems and anxieties generated by reductions in federal aid—even though those cutbacks were not as deep as President Reagan wanted.

Indeed, the officials say, some students have overreacted to the wide publicity given to the President's budget proposals,

Continued on Page 22, Column 1

Number of Lower-Income Students Drops 39 Pct. at Private Colleges

By JACK MAGARRELL

WASHINGTON

With costs of higher education rising and federal aid to students declining, private colleges and universities are reporting a major loss of lower-income students.

A survey of students receiving financial aid at private institutions in 1979-80 and 1981-82 showed a drop of 39 per cent in enrollment of students from families with incomes between $6,000 and $24,000.

Julianne Still Thrift, executive director of the National Institute of Independent Colleges and Universities, which made the survey, blamed the decline on "continuing increases in college costs that coincide with decreased dollars available from federal aid programs."

During the years 1979-80 through 1981-82, undergraduate enrollment at the private institutions rose by about 2 per cent, Ms. Thrift says, but the proportion of undergraduates receiving financial aid dropped from 59 per cent to 56 per cent.

The number of students from higher-income families receiving financial aid rose dramatically during the survey period, she says. Among those with family incomes

Continued on Page 18, Column 3

When Athletes Use Drugs: the College's Role

Colleges and universities should improve their drug-education programs for athletes and coaches, the National Collegiate Athletic Association has recommended. The reasons: to help athletes avoid using street drugs and alcohol, and to prevent abuses of drugs and other substances that some think improve athletic performance.

For details, see The Chronicle's new 'Athletics' section, which begins on Page 25.

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Students Required to Buy Computers

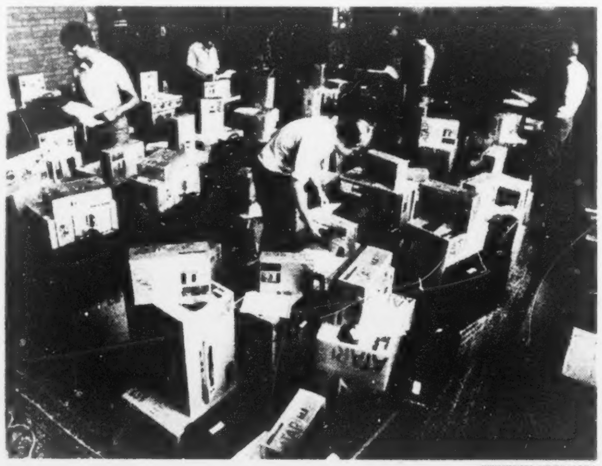
HOBOKEN, N.J.

The Stevens Institute of Technology, which this fall is requiring some of its entering freshmen to purchase microcomputers for use in their science and mathematics courses, will begin distributing the machines to 110 students this week.

The new requirement, aimed at preparing students for computer-oriented professions, applies to about 80 entering freshman who intend to major in science or in systems planning and management. An additional 30 students majoring in engineering are also purchasing computers.

Edward A. Friedman, dean of the college, says the requirement is akin to those at many colleges in "the old days, when every engineering student had to have a slide rule of a certain type."

Students involved in the program—the first of its kind in the country, according to Stevens administrators—will have to pay far more than the price of a slide rule to fulfill the requirement. However, Mr. Friedman says, Stevens intends to provide the students with a discount on the Atari 800 computers, which faculty members say they selected for their versatility and their ability to be upgraded with additional equipment.



STEPHEN GERMANY

Personal computers ready for students are stacked in a room in the Stevens Institute library.

Total Cost: $750

In addition to the computer, each student must own a recorder and video screen, which bring the total cost to about $750. While that is a substantial amount for any student, Mr. Friedman concedes, it represents only about 1.5 per cent of the $50,000 it costs to attend the institute for four years. It falls in the same category as the $100 per semester that students typically pay for textbooks, he says.

The idea for the program came after some Stevens faculty members expressed concern about their students' lack of "computer fluency."

"While all of our students learn how to utilize computers," Mr. Friedman says, "only some make full and appropriate use of them."

Demand for time at the institution's computer center was increasing at the rate of about 30 per cent a year, resulting in longer waits, he says.

Hence faculty members concluded that individual computers would eventually be necessary to satisfy the demand.

Mr. Friedman says Stevens decided to require the students to own their computers, rather than borrow or lease them from the institute, because ownership would make the students "identify with the computer and begin to think of it as a permanent part of their intellectual system."

If the students owned their computers, Mr. Friedman says the administrators reasoned they would be more inclined to develop libraries of software for themselves. Additional equipment, such as disk drives and printers, will be made available by the institute.

Mr. Friedman says instructors have developed programs that will enable students to use their computers in basic-science and computer courses in their freshman and sophomore years and in laboratory courses in their junior and senior years.

"Our intent is to teach the students a wide variety of computer applications and to increase their understanding of the subject matter of mathematics, physics, chemistry, and management science," says Kenneth C. Rogers, president of Stevens.

"We feel that an increased development of computing skills during the first two years will make it easier for upperclassmen to use our other major computer facilities for more complex problem solving," he says.

When students graduate, Mr. Friedman says, they may either keep their equipment or "sell it, just as one sells a textbook. We expect [computer sales] to be an active market in the future."

When he told parents and students in June about the requirement, he says, he was concerned that some might object to the expense.

"But the reaction has been very positive," he says. "We've had no complaints."

—KIM McDONALD

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came in a suit filed in 1977 by American Future Systems, which charged that its First Amendment right to free speech had been violated when the university said the cookware company could present educational information about its merchandise but could not discuss prices and guarantees.

The university maintained that it had the right to regulate sales presentations to protect students' right to privacy and insure a proper atmosphere in the dormitories.

Long Beach Reinstates Women's-Studies Instructor

California State University at Long Beach has reinstated a part-time instructor who was suspended after members of an evangelical Christian group complained that her course promoted lesbianism.

Betty Brooks was again assigned to teach the course called "Women and Their Bodies" that had sparked the complaints from the Christian group. The university found after an investigation that the course was "appropriately balanced" in subject matter. Ms. Brooks agreed to meet with university administrators for counseling on her teaching methods.

Founder of Bible College Guilty of Forgery

The founder of a Los Angeles Bible college that was closed by the State of California has pleaded guilty to charges that he fraudulently helped students obtain teaching credentials.

The Rev. R. D. Jordan, who operated St. Stephens Educational Bible College, was charged with forgery and grand theft.

Librarian Rejects Job in Stockton State Row

Judith A. Sessions, whose appointment as director of library services at Stockton State College was approved last month after a lengthy controversy, has accepted a position at another institution.

In a letter to Peter M. Mitchell, Stockton State's president, Ms. Sessions said that because of the "uncertainty" and the "cloud of controversy" that had surrounded her appointment since April, she had found other employment.

She charged the board of trustees, which deferred her appointment while it examined the college's search procedure, with causing "damage to professional reputations and careers."

The board reviewed the search procedure after charges that the committee's choice of Ms. Sessions, who is white, had been racially biased. The second choice for the position was a black man.

Five academic officials at the college resigned last month in protest over the board's action.

Correction

Because of a computer error, incorrect data were reported for one item in a survey of campus problems and policies involving alcoholic beverages (*The Chronicle*, July 21). The correct percentages of institutions reporting increases in the alcohol-related problem of loss of memory are:

All institutions	19.9%
Private universities	14.0%
Private liberal-arts colleges	23.1%
Church-related institutions	16.1%
Public 4-year institutions	33.3%
Public 2-year colleges	9.7%
Northeast	
Private	17.9%
Public	33.3%
South-Southeast	
Private	6.7%
Public	26.7%
Midwest	
Private	25.6%
Public	16.7%
West-Southwest	
Private	12.5%
Public	20.0%

Notes from Brunswick, Me.

BRUNSWICK, ME.

In late summer, Maine is suffused with the colors of northern wildflowers—pale yellow, robin's-egg blue, indigo, mauve, and a dozen others. Wildflowers line the dusty shoulders of rural roads, sprout among ferns in the green woods, and gather to sway with the reeds around springs and ponds and slow streams. They are modest flowers, with small petals and brief lives, well matched to a frugal countryside and an unpretentious populace.

The lack of pretense is refreshing. Maine is a state of two-lane highways and single-track grade crossings, of cornfields and berry patches, of ruined milldams and rusting iron bridges, of weathered farmhouses linked to listing barns by connecting kitchens and woodsheds and passageways. Its people, who seem as hardy and weathered as their surroundings, are practical and straightforward.

That is not to say that they are unconcerned with the aesthetic. The sixth Maine Arts Festival, conceived to celebrate artistic manifestations of the local temperament, recently brought dancers, musicians, actors, artists, clowns, and potters—not to mention crowds of spectators—to a broad quadrangle on the campus of Bowdoin College here.

Many of Maine's most talented citizens, one Bowdoin official explained, are unassuming folks, and need to be coaxed out with the promise of a festival if they are to perform for their neighbors at all. Bowdoin, however, did little more than lend the festival its campus; the coaxing—and a thousand other chores—was handled by the Maine Arts Festival's organizing committee.

So there appeared on the quadrangle quilters, and makers of ceramic mobiles, and some men who were raising a small barn. There were puppeteers presenting *Punch and Judy*, vendors offering lobster and steamers, and musicians performing Bach and Sousa. There were folk dances by Russian émigrés, strolling clowns, and a man from the town of Rangeley who carved four-foot bears and Indians out of logs with a chainsaw.

For those seeking more refined design, Bowdoin provided the splendid Walker Art Building, designed in the Beaux-Arts 1890's by Charles McKim of McKim, Mead & White.

The building houses Bowdoin's art museum, best known for its early American portraits and for its collection of classical pottery. Most of the portraits, including several by Robert Feke and Gilbert Stuart, are of members of the Bowdoin family. Among them is James Bowdoin, II, the governor of Massachusetts whom the college's name honors; when Bowdoin was chartered in 1794, what later became Maine was still a territory of Massachusetts.

Arctic Artifacts

Across the quadrangle are more exotic collections. In Hubbard Hall, once the college's library, is the Peary-MacMillan Arctic Museum, which preserves artifacts from expeditions by two Bowdoin alumni—Adm. Robert E. Peary, the first man to reach the North Pole (on April 6, 1909), and Donald B. MacMillan, who accompanied Peary on the 1909 trip and later led several arctic expeditions of his own. The museum's collection includes snowshoes, stuffed walruses, one of Admiral Peary's sledges, and a model of the schooner Mr. MacMillan designed for his expeditions. He named her the *Bowdoin*.

And upstairs, off a dingy corridor, is a room so well hidden that many people at the college don't even know it exists. It is the library from the New York townhouse of Susan Dwight Bliss, whose father brought its ceiling from a sixteenth-century Neopolitan *palazzo* and its hand-bound books from all over. It is less a library—one dares not sit on its 400-year-old chairs—than a museum of book-binding styles, from the Renaissance's classical motifs to designs from England's nineteenth-century arts-and-crafts movement.

Bowdoin College, however, is proudly American. Its most honored alumni are Nathaniel Hawthorne and Henry Wadsworth Longfellow, who were both graduated in 1825. And its latest exercise in democracy has been to require its fraternities, which provide much of the campus's social life, to allow female students the same access males have and an equal voice in chapter decisions.

Bowdoin is, if anything, even more proud of its Maine setting—and of the taste for the unpretentious that the rigors of life here in the North tend to awaken in students and faculty members alike. For years, this campus was the first in the Western Hemisphere on which the morning sun shone: Its seal remains a stylized, smiling sunburst.

—LAWRENCE BIEMILLER

SCOTT PERRY

Members of Fiddler's Reach Dancers perform at the Maine Arts Festival at Bowdoin College.

Average Salaries for Faculty Members at Over

WASHINGTON

The following table shows average faculty salaries, in thousands of dollars, as reported for the 1981-82 academic year by more than 2,500 colleges and universities.

The figures were compiled for the American Association of University Professors by Maryse Eymonerie Associates, McLean, Va., from data collected by the National Center for Education Statistics.

A table showing national salary averages from the A.A.U.P. survey by rank, sex, type of institution, and union status appeared in the July 7 issue of *The Chronicle*.

The figures listed below for individual institutions show average salaries, not including fringe benefits, for full-time faculty members, adjusted to a nine-month basis.

The Roman numerals, I, IIA, IIB, III, and IV refer to categories in the A.A.U.P. rating scale at right.

The ratings are based on national percentile rankings. Institutions in category IV do not have academic ranks; their average salaries are shown in the column headed "Inst" (instructors).

Institutions marked with an asterisk are church-related colleges that have reported salaries for lay faculty members only. A blank space indicates that an institution has no faculty members at that rank; a dash indicates that the statistical sample is too small to be significant.

The table omits footnotes qualifying the figures reported by some institutions.

The complete report is available from the A.A.U.P., One Dupont Circle, Washington 20036, at $20 for nonmembers.

ALABAMA

	Prof	Assoc prof	Asst prof	Inst
Ala A&M U, IIA	24.0	21.5	18.2	14.2
Ala Christian C, III	21.7	—	16.2	14.7
Ala St U, IIA	25.3	22.8	19.3	16.5
Alexander City St JC, IV				19.6
Auburn U, I	32.7	25.9	21.6	15.3
Montgomery, IIA	28.5	24.0	18.8	15.9
Birmingham-Southern C, IIB	24.1	19.4	17.4	—
Booker T Washington Business C, IV				12.6
Brewer St JC, IV				20.4
Chattahoochee Valley CC, IV				19.2
Enterprise St JC, IV				20.3
Gadsden St JC, IV				19.7
George C Wallace St CC				
Dothan, IV				19.1
Selma, IV				19.2
Huntingdon C, IIB	18.4	17.1	15.7	13.2
Jacksonville St U, IIA	27.0	25.9	21.4	18.6
Jefferson Davis St JC, IV				18.8
Jefferson St JC, IV				20.5
John C Calhoun St CC, IV				20.0
Judson C, IIB	18.2	—	14.9	—
Lawson St CC, III				19.9
Livingston U, IIA	22.2	17.6	15.3	12.6
Lurleen Wallace St JC, IV				19.0
Marion Military Inst, IV				14.5
Miles C, IIB	—	12.2	12.8	10.8
NE Ala St JC, IV				19.5
NW Ala St JC, IV				19.3
Patrick Henry St JC, IV				19.8
S D Bishop St JC, IV				18.6
Selma U, IIB	—	—	7.4	—
Snead St JC, IV				20.3
S Union St JC, IV				19.1
Spring Hill C*, IIB	24.6	19.7	17.4	—
Stillman C, IIB	—	13.6	14.6	—
Talladega C, IIB	21.7	16.8	15.5	14.0
Troy St U, IIA	25.8	20.2	18.9	14.7
Dothan-Ft Rucker, IIA		—	20.0	
Montgomery, IIA	—	18.7	17.1	
Tuskegee Inst, IIA	27.1	21.6	18.4	14.9
U of Alabama, I	32.7	24.6	20.2	15.4
Birmingham, I	35.8	26.5	20.3	15.9
Huntsville, IIA	29.6	23.9	18.6	15.6
U of Montevallo, IIA	25.1	21.7	18.8	13.3
U of N Alabama, IIA	29.7	24.1	20.4	16.8
U of S Alabama, IIA	28.3	22.7	19.3	17.5
Walker C, IV				17.3
Wallace St CC, IV				18.8

ARIZONA

	Prof	Assoc prof	Asst prof	Inst
American Graduate Sch of International Management, IIA	27.3	23.2	20.4	—
Arizona St U, I	37.3	28.9	22.9	17.9
Arizona W C, IV				22.5
Central Arizona C, IV				23.4
Cochise C, IV				20.2
C of Ganado, III		—	—	13.6
E Arizona C, IV				21.9
Glendale CC, IV				30.2
Grand Canyon C, IIB	23.1	21.4	—	
Mesa CC, IV				29.9
Mohave CC, IV				20.4
N Arizona U, I	35.9	29.1	23.0	18.0
Northland Pioneer C, IV				20.1
Phoenix C, IV				30.5
Pima CC, IV				22.3
Scottsdale CC, IV				28.2
U of Arizona, I	33.6	28.6	23.3	17.4
Yavapai C, IV				22.9

ARKANSAS

	Prof	Assoc prof	Asst prof	Inst
Arkansas St U, IIA	27.7	24.2	19.7	15.7
Beebe, III		—	18.7	
Arkansas Tech U, IIB	23.8	21.2	19.2	16.7
Central Baptist C, IIB	15.1	—		—
C of the Ozarks, IIB	17.3	16.3	14.4	13.4
Crowley's Ridge C, IV				8.8
E Arkansas CC, IV				16.5
Garland County CC, IV				16.1
Harding U, IIA	23.0	19.4	17.3	14.5
Henderson St U, IIA	24.7	20.4	17.3	15.2
Hendrix C, IIB	26.0	21.7	17.8	—
John Brown U, IIB	25.6	20.8	19.5	15.9
Miss County CC, IV				15.5
N Arkansas CC, IV				19.0
Ouachita Baptist U, IIA	25.7	21.0	18.2	15.5
S Arkansas U, IIA	24.0	21.2	18.8	14.8
El Dorado, IV				15.7
Tech, IV				16.2
S Baptist C, IV				14.3
U of Arkansas, I	31.9	24.9	20.8	16.1
Little Rock, IIA	31.8	24.7	20.7	13.6
Monticello, IIB	23.5	20.2	17.4	14.5
Pine Bluff, IIB	22.9	20.9	18.2	14.7
U of Central Arkansas, IIA	26.0	22.1	18.9	16.0
Westark CC, IV				18.1

CALIFORNIA

	Prof	Assoc prof	Asst prof	Inst
Allan Hancock C, IV				27.1
American Baptist Sem of the West, IIA	23.0			
Antelope Valley C, IV				26.7
Art Center C of Design, IV				19.2
Azusa Pacific C, IIA	22.5	19.0	16.0	14.1
Bakersfield C, III	31.3	26.2	[illegible]	—
Barstow C, IV				[illegible]
Bethany Bible C, IIB	—	20.5	[illegible]	
Biola U, IIA	26.8	22.2	[illegible]	15.3
Brooks C, IV				13.8
Cabrillo C, IV				29.3
Cal Baptist C, IIB	21.6	17.0	—	—
Cal C of Arts & Crafts, IIA	21.7	15.8		
Cal C of Podiatric Medicine, IIA	31.0	—	—	
Cal Inst of Art, IV				23.1
Cal Inst of Tech, I	45.7	33.3	27.0	17.2
Cal Lutheran C, IIA	27.5	22.8	19.6	16.6
Cal Maritime Acad, IIB	—	27.1	23.1	
California St U and C				
Bakersfield, IIA	35.1	27.5	21.9	
Chico, IIA	35.2	27.0	22.0	18.9
Dominguez Hills, IIA	34.8	27.1	22.1	—
Fresno, IIA	35.5	27.1	22.2	20.1
Fullerton, IIA	35.0	27.3	21.9	19.4
Hayward, IIA	35.2	28.0	22.0	—
Humboldt St U, IIA	35.2	27.3	22.1	20.3
Long Beach, IIA	35.6	27.9	21.9	19.6
Los Angeles, IIA	35.4	27.4	22.7	—
Northridge, IIA	35.2	27.1	22.4	19.5
Sacramento, IIA	35.4	27.3	22.1	18.7
San Bernardino, IIA	35.1	27.2	22.1	—
San Diego St U, IIA	35.8	27.4	22.5	20.3
San Fran St U, IIA	35.6	26.7	22.1	19.5
San Jose St U, IIA	35.6	27.3	22.3	20.2
Sonoma St U, IIA	35.5	27.8	21.8	—
Stanislaus, IIA	35.4	27.4	21.9	19.0
Cal Poly St U				
Pomona, IIA	35.0	26.6	22.0	—
San Luis Obispo, IIA	34.8	27.2	22.2	19.8
California W Sch of Law, IIA	42.1	35.4	29.1	
Cerritos C, IV				32.5
Cerro Coso CC, IV				27.8
Chabot C, IV				31.9
Chaffey C, III	31.5	28.0	23.2	
Chapman C, IIA	30.9	24.5	19.8	
Christian Heritage C, IIB		16.1		
Church Divinity Sch of the Pacific, IIA	24.6	—	—	
Citrus C, IV				31.1
Claremont Graduate Sch, I	40.9	29.0	23.2	
Claremont McKenna C, IIB	33.7	25.7	20.8	
Coastline CC, IV				26.6
Coleman C, IIB				14.1
C of Alameda, IV				27.2
C of the Desert, III	35.7	32.8	28.4	—
C of Marin, IV				29.1
C of Notre Dame, IIA	24.3	19.4	16.8	14.8
C of Osteopathic Medicine of the Pacific, IIA	—	—	22.9	
C of the Redwoods, IV				27.4
C of the Sequoias, IV				31.8
Compton CC, III	24.5	35.8	26.0	13.6
Contra Costa C, IV				33.4
Crafton Hills C, III				29.5
Cuesta C, IV				31.2
Cypress C, IV				31.9
De Anza C, IV				30.8
Diablo Valley C, IV				34.2
Dominican C of San Rafael, IIA	—	14.5	16.0	13.5
E Los Angeles C, IV				33.8
El Camino C, IV				31.4
Foothill C, IV				30.9
Fresno Pacific C, IV				20.0
Fuller Theol Sem, IIA	25.5	20.2	19.4	
Fullerton C, IV				33.7
Gavilan C, IV				26.3
Glendale CC, IV				27.9
Golden Gate U, IIA	43.5	36.5	26.5	
Hartnell C, IV				32.6
Harvey Mudd C, IIB	36.9	27.3	19.7	—
Holy Names C, IIA	—	17.3	16.6	—
Imperial Valley C, IV				27.5
Indian Valley C, IV				27.6
Kings River CC, IV				26.1
Lake Tahoe CC, IV				28.6
Life Bible C, IV				13.3
Loma Linda U, I	21.0	20.3	18.4	16.9
LA Baptist C, IIB	—	18.0	—	
LA City C, IV				33.4
LA C of Chiro, IIA	—	—	16.5	14.5
LA Harbor C, IV				34.3
LA Mission C, IV				32.5
LA Pierce C, IV				34.1
LA Southwest C, IV				33.0
LA Trade-Tech C, IV				32.9
LA Valley C, IV				34.5
Los Medanos C, IV				26.5
Loyola Marymount U, IIA	36.6	26.6	21.3	18.3
Mendocino C, IV				27.9
Menlo C, IV				22.2
Merritt C, IV				28.4
Mills C, IIA	32.1	24.0	20.1	16.6
Mira Costa C, IV				31.0
Monterey Inst of International Studies, IIA	26.4	20.3	17.1	15.1
Monterey Peninsula C, IV				29.7
Mt St Mary's C, IIA	24.9	19.6	18.5	14.9
Napa C, IV				23.3
National U, IIA	24.5	20.2	—	
Naval Postgraduate Sch, I	40.9	33.7	27.1	
Occidental C, IIA	33.6	25.5	19.6	—
Ohlone C, III	32.7	30.2	27.3	25.3
Orange Coast C, IV				34.6
Otis Art Inst of Parsons Sch of Design, IIA				25.8
Pacific Christian C, IIB	12.6	—		
Pacific Oaks C, IV				15.7
Pacific Union C, IIA	22.1	21.0	19.6	18.2
Palo Verde C, IV				26.0
Palomar C, IV				32.0
Pasadena C of Chiropractic, IIA				10.8
Pepperdine U, IIA	33.8	[illegible]	22.1	
Pitzer C, IIB	[illegible]	22.1	20.4	
Point Loma C, IIA	24.0	21.2	17.3	14.8
Po[illegible]	35.2	26.5	20.8	19.0
Porterville C, III	31.7	26.8	22.1	
Rio Hondo C, III	35.2	33.3	31.0	27.0
Riverside City C, III		30.5	26.2	22.0
St Mary's C of California*, IIA	34.0	25.1	21.5	
San Bernardino Valley C, IV				30.9
San Francisco Art Inst, IV				18.1
San Francisco CC, IV				28.0
San Francisco Conservatory of Music, IV				18.4
Santa Ana C, IV				31.4
Santa Barbara City C, IV				29.6
Santa Rosa JC, IV				31.4
Sch of Theol at Claremont, IIA	20.7			
Scripps C, IIB	34.1	25.5	20.3	
Shasta C, IV				32.4
Sierra C, IV				28.9
Simpson C, IIB	18.4		—	
Solano CC, IV				27.5
S California C, IIB	27.5	23.8	22.4	
S California C of Optometry, IIA	—	—	23.7	—
Southwestern U Sch of Law, IIA	37.7	28.5		20.1
Stanford U, I	46.0	32.5	25.1	31.2
U of California				
Berkeley, I	42.8	28.0	23.2	—
Davis, I	39.3	27.0	22.8	
Hastings C Law, IIA	42.1	—		
Irvine, I	40.0	27.3	22.5	
Los Angeles, I	41.8	28.0	23.2	
Riverside, I	39.2	27.0	[illegible]	
San Diego, I	40.7	27.4	22.4	
San Francisco, I	43.0	33.1	27.7	—
Santa Barbara, I	39.7	27.6	22.3	
Santa Cruz, I	38.9	27.1	22.1	
U of La Verne, IIA	27.5	20.7	16.2	
U of the Pacific, IIA	31.4	25.2	21.2	20.2
U of Redlands, IIA	25.7	21.6	18.4	
U of San Diego*, IIA	34.9	24.1	20.1	
U of San Francisco, IIA	38.1	28.1	23.9	18.5
U of Santa Clara*, IIA	42.2	31.1	23.2	
U of S California, I	41.6	29.1	23.8	20.1
Victor Valley C, IV				26.6
West Hills C, IV				29.8
West LA C, IV				33.1
Westmont C, IIB	26.0	21.7	18.9	
Whittier C, IIA	31.9	25.6	18.3	18.0
Woodbury U, IV				24.3

AAUP Rating Scale

Category I: University Level

	1 +	1	2	3	4
Professor	$42,940	$38,940	$36,640	$34,020	$31,840
Associate professor	30,280	28,150	27,140	25,910	24,880
Assistant professor	24,680	22,920	21,930	21,110	20,310
Instructor	21,190	18,880	17,510	16,750	15,790

NOTE: Institutions in Category I offer the doctorate and in the most recent three years conferred an annual average of 15 or more earned doctorates in at least three nonrelated disciplines.

Category IIA: College Level

	1 +	1	2	3	4
Professor	$36,210	$32,790	$30,160	$27,590	$24,290
Associate professor	28,470	26,450	24,860	23,070	20,830
Assistant professor	23,390	21,800	20,410	19,240	17,690
Instructor	20,220	18,100	16,800	15,900	14,820

NOTE: Institutions in Category IIA award degrees above the bachelor's degree but do not qualify for Category I.

Category IIB: Bachelor's-Degree Level

	1 +	1	2	3	4
Professor	$33,520	$28,510	$25,660	$23,120	$20,410
Associate professor	25,960	23,300	21,190	19,590	17,570
Assistant professor	21,330	19,490	17,830	16,640	15,430
Instructor	18,430	16,700	15,380	14,270	13,070

NOTE: Institutions in Category IIB award only the bachelor's degree or its equivalent.

Category III: Two-Year-College Level

	1 +	1	2	3	4
Professor	$32,420	$29,940	$26,360	$24,400	$22,330
Associate professor	28,310	25,080	22,950	21,610	19,770
Assistant professor	23,780	21,050	19,720	18,650	16,900
Instructor	20,320	17,810	16,480	15,500	14,150

Category IV: Institutions Without Ranks

1 +	1	2	3	4
$29,750	$23,790	$20,280	$17,790	$15,320

Scales are based on actual distributions of average salary by number of institutions in 1980-81. Percentile rankings are as follows: 1 + = 95th percentile; 1 = 80th percentile; 2 = 60th percentile; 3 = 40th percentile; 4 = 20th percentile.

COLORADO

	Prof	Assoc prof	Asst prof	Inst
Adams St C, IIA	28.3	24.0	21.6	
Aims CC, IV				19.9
Arapahoe CC, IV				20.0
Colorado C, IIB	35.3	25.2	20.1	16.6
Colo Mountain C, III	24.4	19.2	16.8	17.5
Colo Sch of Mines, I	36.1	27.2	21.5	—
Colorado St U, I	33.4	26.4	22.2	18.6
Colorado Tech C, IV				12.1
CC of Denver				
Auraria, IV				19.5
North campus, IV				20.4
Red Rocks, IV				19.6
Conservative Baptist Theol Sem, IIA	19.3	—		
Ft Lewis C, IIB	28.3	23.1	19.6	—
Lamar CC, IV				16.2
Loretto Heights C, IIB	25.0	19.6	15.7	12.6
Mesa C, IIB	26.1	22.7	19.0	17.7
Metropolitan St C, IIB	29.0	24.3	20.9	17.3
Morgan CC, IV				19.1
Nazarene Bible C, III	16.9		—	
Otero JC, IV				19.8
Pueblo Voc CC, IV				20.3
Regis C, IIB	25.7	21.3	17.0	—
Trinidad St JC, IV				19.2
U of Colorado				
Boulder, I	32.5	25.4	21.4	21.3
Colo Springs, IIA	30.8	24.4	20.8	—
Denver, I	30.0	22.9	20.0	16.4
Health Science Center, I	33.7	29.4	22.2	18.8
U of N Colorado, I	28.6	22.0	18.0	16.2
U of S Colorado, IIA	27.9	24.6	19.9	15.6
W Bible C, IV				17.1
Western St C, IIA	28.7	22.7	19.0	14.7

CONNECTICUT

	Prof	Assoc prof	Asst prof	Inst
Albertus Magnus C, IIB	22.3	19.9	17.1	—
Asnuntuck CC, IV				19.8
Central Conn St C, IIA	32.3	25.7	21.8	18.5
Connecticut C, IIA	29.7	23.2	18.7	—
E Conn St C, IIA	32.0	25.1	20.8	—
Fairfield U, IIA	30.5	25.7	21.7	—
Greater Hartford CC, III	26.7	23.4	20.4	14.3
Greater New Haven Tech C, III		—	20.1	18.9
Hartford Graduate Center, IIA	26.7	—	—	
Hartford Sem, IIA	22.3			
Hartford St Tech C, III	29.2	24.9	21.7	
Housatonic Regional CC, III	26.0	22.7	21.5	—
Manchester CC, III	25.9	22.9	20.1	16.0
Mattatuck CC, III	24.8	22.7	20.2	16.0
Middlesex CC, III	26.7	23.7	20.9	—
Mitchell C, IV				17.5
Norwalk CC, III	25.9	23.5	20.4	—
Norwalk St Tech C, III	28.2	26.2	21.9	—
Post C, IIB	—	21.9	16.5	—
Quinnipiac C, IIA	28.0	25.3	20.7	17.4
Sacred Heart U, IIB	26.6	22.3	17.2	—
St Joseph C, IIB	24.4	20.9	18.4	16.1
S Central CC, III	25.2	21.7	19.3	15.8
Thames Valley St Tech C, III	29.6	25.1	21.1	—
Trinity C, IIA	35.8	25.7	20.5	—
Tunxis CC, III	—	21.1	19.1	—
U of Bridgeport, IIA	33.1	25.2	20.5	17.3
U of Connecticut, I	38.2	27.3	21.8	19.4
U of Hartford, IIA	31.3	24.9	20.5	17.1
U of New Haven, IIA	29.3	25.6	21.7	
Waterbury St Tech C, III	29.4	25.5	22.0	
Wesleyan U, IIA	37.6	26.1	20.7	17.1
Western Conn St C, IIA	29.6	24.0	20.5	16.5
Yale U, I	44.8	27.2	21.2	17.3

DELAWARE

	Prof	Assoc prof	Asst prof	Inst
Brandywine C of Widener U, III		20.8	17.5	—
Delaware St C, IIB	32.0	24.7	21.5	18.4
Del Tech & CC				
Southern campus, IV				23.1
Stanton-Wilmington, IV				22.7
Terry, IV				21.5
Goldey Beacom C, III	23.5	—	16.8	—
U of Delaware, I	38.4	27.0	20.9	17.8
Wesley C, IIB	21.2	19.8	16.6	13.2
Wilmington C, IIA	20.7			

DISTRICT OF COLUMBIA

	Prof	Assoc prof	Asst prof	Inst
American U, I	35.1	26.7	22.2	19.9
Catholic U of America, I	31.2	24.0	19.8	15.0
Gallaudet C, IIA	35.5	28.5	22.7	17.9
Georgetown U, I	40.1	29.6	23.1	17.0
George Washington U, I	37.4	27.4	21.6	14.7
Howard U, I	35.5	27.2	22.4	18.8
Mt Vernon C, IIB	29.6	—	18.8	—
Strayer C, IIB	—	17.6	16.3	14.4

2,500 U.S. Colleges and Universities, 1981-82

DISTRICT OF COLUMBIA—Cont.

	Prof	Assoc prof	Asst prof	Inst
Trinity C, IIA	22.0	16.8	13.6	12.0
U of District of Columbia, IIA	34.2	27.3	22.5	19.4
Wesley Theol Sem, IIA	28.0			

FLORIDA

	Prof	Assoc prof	Asst prof	Inst
Barry C, IIA	25.2	21.4	16.9	—
Bethune-Cookman C, IIB	21.1	18.9	17.5	14.5
Brevard CC, IV				20.1
Broward CC, IV				18.9
Central Fla CC, IV				18.6
Chipola JC, IV				17.4
Daytona Beach CC, IV				18.1
Eckerd C, IIB	25.7	22.4	18.5	
Edison CC, IV				16.2
Edward Waters C, IIB		14.2	12.6	—
Embry-Riddle Aeronautical U, IIA	28.3	21.8	17.2	14.3
Florida A&M U, IIA	29.4	23.7	19.7	13.7
Florida Atlantic U, IIA	32.0	24.4	19.0	17.3
Florida C, IV				15.7
Florida Inst of Tech, I	26.6	22.3	18.0	13.6
Florida International U, IIA	32.0	24.8	20.1	16.9
Florida JC, IV				21.1
Florida Keys CC, IV				18.1
Florida St U, I	34.4	24.5	20.3	17.3
Gulf Coast CC, III	—	21.0	19.5	18.5
Hillsborough CC, IV				16.7
Indian River CC, III	24.6	22.6	18.9	14.6
Jacksonville U, IIA	21.3	18.1	14.3	—
Lake City CC, IV				20.2
Lake-Sumter CC, IV				19.5
Manatee JC, III	21.5	18.8	18.3	16.1
Miami-Dade CC, III	25.8	21.8	17.2	14.6
North Florida JC, IV				17.7
Nova U, I	36.4	29.7	24.1	
Okaloosa-Walton JC, IV				20.8
Palm Beach JC, III	20.4	19.6	19.5	17.2
Pasco-Hernando CC, IV				15.3
Pensacola JC, III	25.8	21.8	19.3	15.4
Polk CC, IV				20.5
Ringling Sch of Art & Design, IV				18.0
Rollins C, IIA	32.3	24.9	19.0	—
St Johns River CC, IV				15.9
St Leo C*, IIB	20.4	16.4	14.1	
St Petersburg JC, IV				19.6
Santa Fe CC, IV				19.7
Seminole CC, IV				20.3
S Florida JC, IV				19.8
SE C of Assemblies of God, IIB	19.8	18.5	17.0	
Stetson U, IIA	27.4	20.8	18.8	12.9
Tallahassee CC, IV				21.0
U of Central Fla, IIA	32.5	25.2	20.6	16.0
U of Florida, I	35.0	25.8	22.7	18.0
U of Miami, I	34.6	25.7	21.0	16.5
U of N Florida, IIA	30.3	25.2	20.3	
U of S Florida, I	32.6	25.0	20.3	17.5
U of Tampa, IIA	25.3	19.8	16.6	—
U of W Florida, IIA	30.5	25.0	20.3	17.0
Valencia CC, IV				21.7
Warner S C, IIB	17.8	—	13.8	12.3

GEORGIA

	Prof	Assoc prof	Asst prof	Inst
Agnes Scott C, IIB	27.4	21.9	18.2	14.9
Albany JC, IIB	—	22.7	19.6	16.4
Albany St C, IIB	29.1	25.3	20.6	17.0
Atlanta C of Art, IV				14.3
Augusta C, IIA	32.6	24.8	20.2	16.9
Bainbridge JC, III		22.7	20.1	15.8
Berry C, IIA	27.9	22.8	19.2	17.3
Brewton-Parker C, IV				12.0
Clark C, IIB	23.1	18.7	16.1	13.0
Columbus C, IIA	28.0	23.7	20.1	16.8
Covenant C, IIB	23.0	20.0	17.0	
Emanuel County JC, III	—	—	20.3	—
Emory U, I	37.0	26.6	21.2	16.1
Georgia C, IIA	29.0	23.2	19.0	17.3
Georgia Inst of Tech, I	35.3	26.8	21.2	—
Georgia S C, IIA	29.7	24.5	19.7	15.1
Georgia SW C, IIA	29.3	24.3	20.4	16.7
Georgia St U, I	38.4	28.3	23.2	18.0
Interdenominational Theol Center, IIA	—	20.6	—	13.8
Kennesaw C, III	32.0	25.9	23.0	18.8
La Grange C, IIA	23.0	19.3	16.9	
Macon JC, III	—	23.3	19.7	14.4
Mercer U, IIA	28.9	22.9	18.9	16.4
Atlanta, IIB	20.3	17.9	16.9	15.1
Mercer U Southern Sch of Pharmacy, IIA	—	—	18.3	—
Middle Georgia C, III	23.4	21.5	19.2	16.9
Morris Brown C, IIB	19.1	16.2	13.2	11.5
N Georgia C, IIB	28.8	23.6	20.5	17.3
Oglethorpe U, IIA	29.0	22.0	19.0	
Paine C, IIB	—	15.2	13.2	14.3
Phillips C, IV				8.2
Piedmont C, IIB	12.4	11.0	—	
Reinhardt C, III		15.0	—	
Savannah St C, IIA	29.0	24.0	20.2	—
Shorter C, IIB	21.4	17.3	15.2	
S Georgia C, III		23.2	20.8	17.5
Southern Tech Inst, IIB	28.9	23.5	21.7	
Spelman C, IIB	26.9	18.4	14.3	10.6
Tift C, IIB	20.5	15.2	13.9	
Toccoa Falls C, IV				14.4
Truett McConnell C, IV				14.5
U of Georgia, I	39.0	28.5	22.5	16.7
Valdosta St C, IIA	28.5	23.8	20.6	17.2
Waycross JC, IV			20.5	—
Wesleyan C, IIB	20.1	17.0	16.2	—
W Georgia C, IIA	29.5	23.1	20.1	15.8
Young Harris C, IV				16.8

HAWAII

	Prof	Assoc prof	Asst prof	Inst
Chaminade U, IIB	21.8	18.8	16.5	13.3
Hawaii Loa C, IIB	—	18.9	16.8	—
U of Hawaii,				
Hilo, IIB	32.6	24.9	20.1	
Manoa, I	35.1	26.1	21.2	17.1
Honolulu CC, IV				23.1
Kapiolani CC, IV				25.1
Kauai CC, IV				23.1
Leeward CC, IV				23.6
Maui CC, IV				22.9
West Oahu C, IIB		21.3	—	
Windward CC, IV				21.3

IDAHO

	Prof	Assoc prof	Asst prof	Inst
Boise St U, IIA	26.5	22.4	18.7	16.3
C of Idaho, IIA	20.2	17.3	15.5	
C of S Idaho, III	23.3	20.5	16.3	17.2
Idaho St U, I	28.1	23.0	18.9	17.7
Lewis-Clark St C, IIB	24.6	21.5	18.6	—
North Idaho C, IV				20.3
NW Nazarene C, III	22.6	19.2	17.7	13.9
U of Idaho, I	29.9	23.8	19.8	

ILLINOIS

	Prof	Assoc prof	Asst prof	Inst
American Conservatory of Music, IIA	23.2	—	—	
Augustana C, IIB	30.9	25.3	19.9	16.4
Aurora C, IIB	25.4	20.9	18.6	—
Barat C, IIB	20.2	—	15.7	12.5
Belleville Area C, IV				27.2
Bethany Theol Sem, IIA	24.9			
Black Hawk C				
East campus, III		23.0	19.8	16.1
Quad-Cities, III	28.8	24.8	20.6	16.6
Blackburn C, IV				18.4
Bradley U, IIA	30.8	25.3	20.9	15.6
Carl Sandburg C, IV				20.0
Catholic Theol Union, IIA	29.0	—	—	
Chicago St U, IIA	27.1	22.8	18.7	15.9
City C's of Chicago				
City-Wide C, III	29.9	25.1	22.5	19.1
Kennedy-King C, III	31.7	29.1	26.0	21.9
Loop C, III	31.9	29.0	26.6	21.2
Malcolm X C, III	—	26.0	25.3	21.5
Olive-Harvey C, III	30.9	28.7	26.1	21.4
Richard Daley C, III	31.0	28.6	26.8	19.1
Truman C, III	31.6	28.9	24.9	17.0
Wright C, III	32.7	29.6	26.9	17.8
C of DuPage, IV				27.6
C of Lake County, IV				25.4
C of St Francis, IIB	—	22.4	19.5	17.2
Columbia C, IV				24.2
Concordia C, IIA	22.5	20.8	17.3	
Danville Area CC, IV				21.6
DePaul U, IIA	39.4	28.0	22.6	18.0
Dr William Scholl C of Podiatric Medicine, IIA	—	28.7	19.5	
E Illinois U, IIA	28.1	22.3	19.2	15.6
Elgin CC, IV				23.3
Elmhurst C, IIB	29.2	23.9	18.8	16.9
Eureka C, IIB	21.0	16.6	14.6	
Garrett-Evangelical Theol Sem, IIA	32.6	—	—	
George Williams C, IIA	26.2	19.6	17.9	
Governors St U, IV				23.4
Highland CC, IV				21.7
Ill Benedictine C, IIB	25.2	19.7	17.7	—
Ill Central C, III	29.8	26.0	22.1	17.9
Illinois C, IIB	25.4	22.4	—	14.0
Illinois C of Optometry, IIA		—	21.9	
Ill Eastern CC System				
Frontier CC, IV				13.6
Lincoln Trail C, IV				15.7
Olney Central C, IV				18.3
Wabash Valley C, IV				20.0
Illinois Inst of Tech, I	37.1	29.3	22.3	19.3
Illinois St U, I	31.1	24.7	20.4	17.2
Illinois Valley CC, IV				23.4
Ill Wesleyan U, IIB	27.9	22.2	18.0	16.0
John A Logan C, IV				21.5
John Marshall Law Sch, IIA	51.0	40.4		—
John Wood CC, IV				14.9
Joliet JC, IV				26.1
Judson C, IIB	—	19.3	16.3	
Kankakee CC, IV				19.7
Kendall C, III			16.9	
Kendall Sch of Design, IIB			18.8	15.0
Kishwaukee C, IV				18.8
Knox C, IIB	30.0	23.6	17.9	—
Lake Forest C, IIB	32.2	[illegible]	20.3	17.2
Lake Land C, IV				20.6
Lewis & Clark CC, III	24.3	22.3	19.8	17.0
Lewis U, IIB	23.3	20.1	17.9	15.7
Lincoln Christian C, IIA	17.5	—	15.4	
Lincoln C, III		19.4	—	15.4
Lincoln Land CC, IV				25.0
Loyola U, I	34.0	27.0	22.4	19.9
Lutheran Sch of Theol, IIA	27.6	—		
McCormick Theol Sem, IIA	27.3			18.8
McHenry County C, IV				22.7
McKendree C, IIB	22.8	18.3	18.0	16.4
MacMurray C, IIB	24.3	19.5	17.2	16.1
Mallinckrodt C, IV,				10.2
Millikin U, IIB	28.8	22.5	18.8	15.6
Monmouth C, IIB	25.9	22.1	18.0	—
Moraine Valley CC, III	26.6	22.2	18.4	15.8
Morton C, IV				24.5
Mundelein C, IIA	25.6	20.5	16.1	14.9
National C of Chiropractic, IIA	27.0	24.6	19.8	16.1
N Central C, IIB	27.3	22.9	18.8	16.2
N Park C & Theol Sem, IIB	24.7	20.8	17.4	15.6
NE Illinois U, IIA	27.0	22.6	19.8	18.6
N Illinois U, I	32.5	25.8	20.1	14.0
Northwestern U, I	41.6	28.7	23.4	23.0

ILLINOIS—Continued

	Prof	Assoc prof	Asst prof	Inst
Olivet Nazarene C, IIA	21.9	19.4	16.4	15.0
Parkland C, IV				22.6
Principia C, IIB	28.0	22.9	17.6	14.5
Quincy C, IIB	23.1	20.9	17.8	15.1
Rend Lake C, IV				20.3
Richland CC, III	—	21.9	20.7	17.0
Rock Valley C, IV				22.5
Rockford C, IIB	25.3	20.7	17.7	—
Roosevelt U, IIA	26.3	21.8	18.7	15.4
Rosary C, IIA	—	22.5	17.6	
St Xavier C, IIA	26.6	20.8	17.4	13.6
Sangamon St U, IIA	30.0	25.9	21.6	—
Sauk Valley C, III	23.9	23.3	19.7	15.0
Sch of the Art Inst of Chicago, IIA	22.9	18.8	15.0	
Seabury-Western Theol Sem, IIA	16.5			
Shawnee C, IV				18.7
SE Illinois C, IV				17.6
Southern Ill U				
Carbondale, I	32.4	25.2	20.2	16.8
Edwardsville, IIA	29.5	24.8	20.9	16.8
Spertus C of Judaica, IIA	30.3			
Spoon River C, IV				22.0
Springfield C*, IV				14.0
State CC, IV				17.4
Thornton CC, IV				26.6
Trinity C, IIB	—	16.6	17.4	—
Trinity Evangelical Divinity Sch, IIA	26.6	24.3	20.1	
Triton C, IV				24.9
U of Chicago, I	42.7	28.2	23.7	18.2
U of Illinois				
Chicago Circle, I	37.3	27.5	22.3	18.8
Medical Center, I	37.8	26.8	22.0	17.7
Urbana, I	38.6	27.1	23.2	19.5
Waubonsee CC, IV				25.5
Western Illinois U, IIA	28.2	23.7	20.3	13.5
Wheaton C, IIB	26.2	22.4	18.1	
William R Harper C, III	33.2	28.3	22.0	18.6

INDIANA

	Prof	Assoc prof	Asst prof	Inst
Anderson C, IIA	24.3	21.4	17.5	15.8
Ball St U, I	30.6	24.3	19.1	13.3
Bethel C, IIB	21.1	18.6	16.1	
Butler U, IIA	27.2	21.8	17.7	—
Calumet C, IIB	—	18.3	14.0	—
Christian Theol Sem, IIA	18.2			
Clark C, IV				11.2
Concordia Theol Sem, IIA	20.1	18.1	16.1	
DePauw U, IIB	30.0	24.3	19.2	17.2
Earlham C, IIB	27.8	21.8	17.9	
Ft Wayne Bible C, IIB	—	17.0	—	—
Franklin C, IIB	20.9	18.0	17.5	
Goshen C, IIB	20.8	17.5	16.2	
Grace C, IIA	21.9	18.1	16.2	
Hanover C, IIB	30.7	23.0	17.6	14.2
Huntington C, IIB	—	18.2	16.6	12.6
Indiana Central U, IIA	24.6	20.9	17.8	15.5
Indiana St U, I	29.1	23.5	19.1	14.5
Evansville, IIB	28.9	23.3	19.7	15.8
Indiana U				
Bloomington, I	34.7	25.9	21.0	
East, III			16.8	
Kokomo, IIB	—	22.7	20.0	
Northwest, IIA	34.3	26.3	19.6	
South Bend, IIA	30.4	25.3	19.0	—
Southeast, IIA	28.8	22.6	17.5	
Indiana U–Purdue U				
Fort Wayne, IIA	28.4	24.6	19.4	15.8
Indianapolis, I	33.3	24.8	20.0	13.5
Indiana Voc Tech C				
Central Indiana, IV				16.3
Columbus, IV				14.5
East Central, IV				14.4
Kokomo, IV				15.4
Lafayette, IV				13.6
North Central, IV				14.4
Northeast, IV				16.1
Northwest, IV				15.3
South Central, IV				13.8
Southeast, IV				13.8
Southwest, IV				14.3
Wabash Valley, IV				15.1
Whitewater, IV				13.8
Manchester C, IIB	25.4	20.7	16.4	14.8
Marian C*, IIB	—	18.1	15.7	14.2
Oakland City C, IIB	15.3	—	13.8	11.0
Purdue U, I	38.0	27.7	22.1	15.3
Calumet, IIA	31.1	24.7	20.3	14.1
North Central, IIA	—	24.9	19.7	—
Rose-Hulman Inst of Tech, IIB	32.4	26.3	22.8	
St Joseph's C*, IIB	23.4	21.0	18.3	
St Mary's C*, IIB	29.9	23.9	18.8	—
St Meinrad C*, IIB			18.8	
Taylor U, IIB	23.3	20.4	17.6	—
Tri-State U, IIB	25.2	20.4	17.8	
U of Evansville, IIA	27.3	23.1	19.7	15.2
U of Notre Dame, I	36.2	28.2	22.1	21.4
Valparaiso U, IIA	27.4	22.4	19.0	14.4
Vincennes U, III	24.6	21.3	17.7	15.4
Wabash C, IIB	35.1	26.7	20.7	18.2

IOWA

	Prof	Assoc prof	Asst prof	Inst
Briar Cliff C, IIB	23.4	21.5	18.9	16.0
Buena Vista C, IIB	27.9	22.1	20.7	16.0
Central U of Iowa, IIB	25.7	22.0	18.5	16.0
Clarke C, IIA	—	20.9	16.1	15.0
Coe C, IIB	29.0	22.9	18.5	15.5
Cornell C, IIB	27.9	21.6	18.0	
Des Moines Area CC, IV				19.1
Dordt C, IIB	24.3	22.1	19.5	17.7
Drake U, IIA	28.3	22.7	13.6	16.1
E Iowa CC				
Clinton, IV				18.0
Muscatine, IV				17.5
Scott, IV				18.3
Ellsworth CC, IV				20.0
Faith Baptist Bible C, IIB	18.7	—	—	
Graceland C, IIB	20.8	18.4	15.9	—

IOWA—Continued

	Prof	Assoc prof	Asst prof	Inst
Grand View C, IIB	23.0	19.1	17.1	—
Grinnell C, IIB	32.7	23.7	19.3	18.4
Hawkeye Inst of Tech, IV				18.3
Indian Hills CC, IV				16.8
Iowa Central CC, III	—	20.9	21.4	18.7
Iowa Lakes CC, IV				20.0
Iowa St U of Science & Tech, I	33.4	25.7	20.7	15.4
Iowa Wesleyan C, IIB	18.9	16.6	15.6	—
Iowa Western CC, III	24.2	20.4	17.3	14.2
Kirkwood CC, IV				18.1
Luther C, IIB	25.9	20.9	17.9	16.1
Marshalltown CC, IV				20.0
Marycrest C, IIB		17.6	16.7	
Morningside C, IIA	23.1	19.3	16.9	14.8
Mt Mercy C, IIB		19.2	18.0	15.9
Mt St Clare C*, IV				16.0
N Iowa Area CC, IV				21.6
NE Iowa Tech Inst, IV				16.5
NW Iowa Tech C, IV				17.4
Northwestern C, IIB	[illegible]	22.8	18.4	—
Palmer C of Chiropractic, IIA	20.0	21.2	18.0	15.3
St Ambrose C*, IIB	24.9	23.0	20.5	—
Simpson C, IIB	23.7	20.4	17.9	16.1
Southeastern CC, IV				19.6
U of Dubuque, IIA	23.0	20.3	18.0	—
U of Iowa, I	36.2	27.2	22.4	19.1
U of N Iowa, IIA	29.4	24.6	20.7	16.6
U of Osteopathic Medicine & Health Science, IIA	48.3	34.6	31.4	
Upper Iowa U, IIB		—	12.3	—
Waldorf C, III	20.3	—	—	13.8
Wartburg C, IIB	23.2	20.5	18.4	14.2
Wartburg Theol Sem, IIA	23.3	—	—	
W Iowa Tech, IV				18.0
Westmar C, IIB	21.4	17.8	15.7	15.4
William Penn C, IIB	—	16.3	16.3	

KANSAS

	Prof	Assoc prof	Asst prof	Inst
Baker U, IIB	20.7	17.6	15.3	12.9
Barton County CC, IV				17.8
Bethany C, IIB	22.0	18.5	16.1	13.7
Bethel C, IIB	19.9	17.9	15.0	
Butler County CC, IV				19.5
Central C, IV				13.5
Cloud County CC, IV				19.6
Coffeyville CC, IV				16.9
Colby CC, IV				16.8
Cowley County CC, IV				20.1
Dodge County CC, III	24.5	22.1	18.8	14.1
Donnelly C*, IV				13.7
Emporia St U, IIA	26.1	22.5	19.7	—
Ft Hays St U, IIA	25.9	21.5	18.8	15.8
Ft Scott CC, IV				16.7
Friends U, IIB	19.7	18.0	14.5	—
Garden City CC, IV				18.8
Haskell Indian JC, IV				22.6
Hesston C, IV				14.6
Highland CC, IV				16.4
Hutchinson CC, IV				20.4
Independence CC, IV				19.7
Johnson County CC, IV				23.4
Kansas City CC, IV				19.5
Kansas St U of Ag & Applied Science, I	31.8	24.6	19.9	15.9
Kansas Tech Inst, III	—	—	20.3	—
Kansas Wesleyan, IIB	20.6	16.8	15.6	
Labette CC, IV				17.4
McPherson C, IIB	19.0	—	14.7	
Manhattan Christian C, IIB	21.1	—		
Marymount C of Kansas, IIB		16.9	14.5	11.7
Neosho County CC, IV				19.1
Ottawa U, IIB	20.2	17.2	14.5	—
Pittsburg St U, IIA	25.0	21.6	19.1	15.9
Pratt CC, IV				17.2
St John's C, III	—	—	13.3	—
St Mary of the Plains C*, IIB		16.6	15.4	—
Seward County CC, IV				17.9
Southwestern C, IIB	—	18.3	16.3	—
Sterling C, IIB	19.6	17.7	14.4	
Tabor C, IIB	19.7	—	15.7	14.1
U of Kansas, I	33.3	24.2	20.5	15.9
Washburn U, IIA	30.5	24.6	19.4	16.3
Wichita St U, IIA	32.0	24.6	20.1	15.5

KENTUCKY

	Prof	Assoc prof	Asst prof	Inst
Alice Lloyd C, III			—	11.1
Aubury C, IIB	23.0	19.9	17.6	14.7
Asbury Theol Sem, IIA	23.7	20.6	—	
Bellarmine C, IIB	24.1	20.3	17.3	—
Berea C, IIB	27.1	21.7	18.2	16.2
Brescia C, IIB		20.4	16.7	14.6
Campbellsville C, IIB	20.4	17.0	14.2	12.3
Centre C of Ky, IIB	24.9	20.6	16.9	—
Draughon's C, IV				9.7
E Kentucky U, IIA	27.7	23.6	19.5	16.0
Georgetown C, IIB	24.4	20.5	17.2	—
Ky Christian C, IIB	10.7	11.9		
Kentucky St U, IIA	27.4	21.7	19.0	15.6
Ky Wesleyan C, IIB	23.9	21.2	15.4	
Lexington Theol Sem, IIA	20.2			
Lindsey Wilson C, IV				13.5
Louisville Presbyterian Theol Sem, IIA	30.3	—		
Midway C, IV				15.4
Morehead St U, IIA	27.2	22.8	19.9	15.6
Murray St U, IIA	27.0	23.6	19.7	17.1
N Kentucky U, IIA	32.5	24.0	19.3	16.3
Pikeville C, IIB	19.6	19.0	15.4	—
Thomas More C, IIB	—	15.4	14.4	12.2
Transylvania U, IIB	25.9	20.2	18.2	—

KENTUCKY—Continued

	Prof	Assoc prof	Asst prof	Inst
U of Kentucky, I	35.2	26.8	22.3	19.0
CC System, III	23.3	20.1	17.0	15.0
U of Louisville, I	33.2	24.9	20.9	17.6
Watterson C, IV				11.7
W Kentucky U, IIA	28.4	23.3	19.7	16.0

LOUISIANA

	Prof	Assoc prof	Asst prof	Inst
Bossier Parish CC, IV				20.3
Centenary C of Louisiana, IIB	24.2	22.0	17.3	15.9
Delgado CC, III	26.0	23.3	20.1	17.5
Grambling St U, IIA	29.2	22.4	19.5	15.9
Louisiana C, IIB	22.4	19.7	16.7	—
Louisiana St U				
Alexandria, III	26.9	21.7	19.8	17.1
Eunice, III	—	—	20.1	18.3
Shreveport, IIB	27.7	25.4	21.0	—
Louisiana St U and A&M C, I	36.8	28.0	23.2	16.9
La Tech U, IIA	29.5	24.5	20.9	17.1
McNeese St U, I	27.2	24.7	20.9	17.5
Nicholls St U, IIA	29.8	25.1	22.2	19.2
NE Louisiana U, I	30.3	27.0	21.5	15.8
NW St U of Louisiana, I	25.6	22.3	19.5	16.5
Notre Dame Sem Sch of Theol, IIA	8.8			
Our Lady of Holy Cross C, IIB		—	14.4	
St Mary's Dominican C, IIB	19.9	16.8	15.1	—
SE Louisiana U, IIA	30.0	25.1	21.6	16.9
Southern U A&M C, IIA	27.2	23.5	20.0	16.6
Southern U				
Shreveport-Bossier, III		21.6	19.4	17.9
New Orleans, IIB	26.4	23.6	20.8	16.9
Tulane U, I	32.5	25.8	19.5	13.7
U of New Orleans, IIA	33.0	26.0	20.9	16.2
U of SW Louisiana, IIA	32.6	26.3	22.6	17.7
Xavier U, IIA	21.0	18.7	17.7	14.3

MAINE

	Prof	Assoc prof	Asst prof	Inst
Andover C, IV				13.0
Bates C, IIB	30.8	24.5	19.1	17.5
Bowdoin C, IIB	35.6	25.8	20.1	—
Colby C, IIB	35.5	26.3	19.7	—
C of the Atlantic, IV				19.8
E Maine Voc & Tech Inst, IV				16.7
Husson C, IIB	22.2	19.1	17.6	—
Maine Maritime Acad, IIB	—	20.9	17.6	
N Maine Voc Tech Inst, IV				16.7
Portland Sch of Art, IV				16.9
U of New England, IIB		19.7	16.4	
S Maine Voc & Tech Inst, IV				16.7
Thomas C, IIA		20.7	18.0	—
Unity C, IIB	15.3	—	13.9	13.8
U of Maine				
Augusta, III	24.2	20.8	16.4	13.9
Farmington, IIB	26.8	22.2	18.1	—
Fort Kent, IIB	—	21.7	16.8	—
Machias, IIB	—	22.2	18.1	—
Orono, I	29.8	22.8	18.4	12.8
Presque Isle, IIB	26.8	21.9	17.9	13.5
U of S Maine, IIA	29.3	23.9	18.3	15.7
Westbrook C, IV				15.8

MARYLAND

	Prof	Assoc prof	Asst prof	Inst
Allegany CC, III	—	21.4	18.3	15.6
Anne Arundel CC, III	30.1	25.5	20.9	18.9
Bowie St C, IIA	32.0	26.3	21.5	—
Catonsville CC, III	32.3	26.4	21.9	16.3
Charles County CC, III	27.2	26.3	18.0	16.0
Chesapeake C, III		20.4	17.9	—
C of Notre Dame*, IIB	23.6	20.8	17.4	15.0
Columbia Union C, IIB	18.3	17.5	16.6	15.4
CC of Baltimore, III	30.5	23.8	20.1	18.2
Coppin St C, IIA	29.9	24.9	19.9	15.3
Dundalk CC, III		25.3	21.4	—
Essex CC, III	31.8	26.7	22.3	17.8
Frederick CC, III	—	24.4	18.3	14.6
Frostburg St C, IIA	29.8	24.3	19.9	16.4
Garrett CC, III			19.3	14.1
Goucher C, IIB	29.3	22.6	17.1	14.6
Hagerstown JC, III	25.6	22.1	19.1	
Harford CC, III	30.3	25.9	19.3	16.7
Hood C, IIA	27.6	21.6	17.3	12.6
Howard CC, III	—	26.7	21.7	17.3
Johns Hopkins U, I	43.1	30.9	23.1	18.3
Loyola C, IIA	31.4	26.3	20.8	
Montgomery C				
Germantown, III	—	—	17.1	—
Rockville, III	30.2	26.6	22.2	18.3
Takoma Park, III	30.7	25.5	20.2	—
Morgan St U, IIA	31.2	24.8	20.3	16.3
Mt St Mary's C, IIB	26.5	20.3	16.1	—
Peabody Inst of Johns Hopkins U, IV				14.7
Prince Georges CC, III	30.7	27.4	23.1	19.8
St John's C, IV				18.8
St Mary's C of Maryland, IIB	29.6	24.9	18.3	14.9
Salisbury St C, IIA	31.7	25.5	20.9	16.6
Towson St U, IIA	32.1	27.1	22.3	17.3
U S Naval Acad, IIB	40.6	34.4	25.4	19.7
U of Baltimore, IIA	32.6	27.3	22.6	—
U of Maryland				
College Park, I	35.5	26.1	20.9	15.1
Baltimore County, I	34.9	25.3	20.3	15.8
Baltimore Professional Schools, I	37.3	30.3	22.1	16.9
E Shore, IIB	25.7	24.5	21.6	19.2
University C, IIB	—	—	—	16.6

Continued on Following Page

FACT-FILE—Continued

MARYLAND—Continued

	Prof	Assoc prof	Asst prof	Inst
Washington Bible C, IIA	—	14.7	—	
Washington C, IIB	24.9	20.2	16.7	
W Maryland C, IIB	27.2	22.3	19.2	—
Wor-Wic Tech CC, III			19.3	—

MASSACHUSETTS

	Prof	Assoc prof	Asst prof	Inst
American International C, IIA	25.7	19.4	16.9	12.8
Amherst C, IIB	38.9	27.4	21.8	
Andover Newton Theol Sch, IIA	22.1			
Anna Maria C, IIB		19.9	16.4	
Aquinas JC Milton*, IV				13.1
Assumption C, IIA	26.8	22.1	19.1	—
Atlantic Union C, IIB	18.5	17.8	16.6	
Babson C, IIA	38.5	29.3	25.4	
Bay Path JC, III	—	21.6	18.8	—
Bay St JC of Business, IV				13.2
Becker JC Worcester, III	—	—	16.2	—
Bentley C, IIA	35.2	28.1	22.7	20.3
Berklee C of Music, IV				14.1
Berkshire CC, III	28.0	23.0	20.0	17.2
Blue Hills Regional Tech Inst, IV				22.3
Boston C, I	37.6	27.9	22.1	18.3
Boston Conservatory of Music, IV				12.1
Boston U, I	36.1	26.9	20.9	18.6
Bradford C, IV				17.0
Bridgewater St C, IIA	31.6	25.6	22.7	—
Bristol CC, III	27.6	22.4	20.4	17.2
Bunker Hill CC, III	24.8	21.7	18.6	16.8
Cape Cod CC, III	27.8	23.7	20.5	18.5
Chamberlayne JC, III			—	12.0
Clark U, I	30.8	27.1	20.3	—
C of the Holy Cross, IIA	32.8	25.5	21.0	18.4
C of Our Lady of the Elms*, IIB		21.6	17.4	
Curry C, IIB	24.2	20.8	17.8	14.6
Dean JC, III	—	21.6	17.1	14.0
Eastern Nazarene C, IIA	20.1	17.8	14.1	
Emerson C, IIA	31.4	23.7	20.7	18.5
Emmanuel C, IIA	25.3	20.0	16.8	14.8
Endicott C, III	17.5		14.1	12.8
Episcopal Divinity Sch, IIA	17.0			
Fisher JC, IV				13.3
Fitchburg St C, IIA	29.4	25.3	20.9	13.3
Forsyth Sch of Dental Hygienists, IIA			—	12.0
Framingham St C, IIA	29.7	23.6	21.9	18.4
Franklin Inst of Boston, III	—	20.3	18.5	16.7
Gordon C, IIB	24.4	21.6	17.9	
Gordon-Conwell Theol Sem, IIA	24.6	—	—	
Greenfield CC, III	25.9	23.0	18.7	16.7
Hampshire C, IIB	31.0	24.3	18.9	
Harvard U, I	48.5	27.0	23.4	
Hebrew C, IIB	19.3			
Hellenic C-Holy Cross Sch of Theol, IIA	20.0	—	—	—
Holyoke CC, III	26.2	22.5	20.3	16.4
Laboure JC, III	—	—	17.4	15.9
Lasell JC, III	19.0	17.5	14.7	14.6
Lesley C, IIA	26.7	24.7	19.9	
Mass Bay CC, III	27.3	23.8	19.8	16.6
Mass C of Art, IIA	28.7	23.1	19.9	
Mass C of Pharmacy & Allied Health Sciences, IIB	27.2	21.0	18.5	15.2
Mass Inst of Tech, I	43.5	30.5	24.4	19.7
Massasoit CC, III	22.8	19.6	14.8	12.8
Merrimack C, IIB	29.3	23.7	18.8	
Middlesex CC, III	25.2	21.8	20.2	17.3
Mt Holyoke C, IIB	34.7	26.2	20.2	16.3
Mt Ida JC, IV				12.0
Mt Wachusett CC, III	26.7	23.0	20.7	17.3
New England C of Optometry, IIA	—	25.6	—	18.7
New England Conservatory of Music, IV				19.0
New England Sch of Law, IIA	32.7	25.9	—	
N Adams St C, IIA	30.2	23.1	21.9	16.6
N Shore CC, III	27.2	23.0	20.0	15.7
Quincy JC, IV				22.7
Quinsigamond CC, III	26.3	22.4	19.9	16.6
Regis C, IIB	24.3	20.8	16.5	—
Roxbury CC, III		21.5	19.4	
Salem St C, IIA	30.6	25.5	21.5	18.2
Simmons C, IIA	32.3	25.3	20.9	17.8
Simon's Rock of Bard C, IV				17.2
Smith C, IIA	34.6	26.5	21.4	17.0
SE Mass U, IIA	26.7	19.6	15.2	
Springfield C, IIA	29.9	22.2	18.1	13.6
Springfield Tech CC, III	26.7	23.6	21.0	17.8
Stonehill C*, IIB	26.6	21.1	18.2	
Suffolk U, IIA	31.6	25.7	21.5	15.8
Swain Sch of Design, IIB	—	—	—	12.5
Tufts U, I	40.6	29.8	23.0	19.8
U of Lowell, IIA	34.8	27.8	23.6	21.0
U of Mass				
Amherst, I	36.1	28.4	22.9	19.7
Boston, IIA	39.2	27.6	22.3	—
Wellesley C, IIB	39.4	28.1	23.1	18.1
W New England C, IIA	34.2	25.4	23.0	16.7
Westfield C, IIA	28.7	23.7	21.3	—
Wheaton C, IIB	32.0	25.4	19.2	—
Wheelock C, IIA	29.8	22.8	18.3	—
Williams C, IIB	38.0	27.2	20.6	
Worcester Poly Inst, IIA	34.5	27.5	22.4	—
Worcester St C, IIA	28.9	25.9	22.3	18.1

MICHIGAN

	Prof	Assoc prof	Asst prof	Inst
Adrian C, IIA	28.0	23.7	18.5	17.1
Albion C, IIB	33.8	26.8	19.6	17.2
Alma C, IIB	28.3	23.0	18.0	—
Alpena CC, IV				25.8

MICHIGAN—Continued

	Prof	Assoc prof	Asst prof	Inst
Aquinas C, IIB	—	23.0	19.9	—
Baker JC of Business, IV				18.9
Bay de Noc CC, IV				29.0
Calvin C, IIB	27.1	23.1	21.4	16.6
Calvin Theol Sem, IIA	28.9	—		
Center for Creative Studies, IIB	24.3	21.9	19.7	—
Central Mich U, IIA	31.9	26.2	22.0	17.2
Charles S. Mott CC, IV				28.2
Concordia C, III	24.0	20.5	17.5	15.1
Cranbrook Acad of Art, IV				18.5
Davenport C of Business, IV				24.4
Delta C, III	31.7	28.1	23.8	18.9
Detroit C of Business Admin, IV				21.4
Detroit C of Law, IIA	33.9	—		
E Michigan U, IIA	30.2	25.2	21.9	18.1
Ferris St C, IIA	27.9	24.1	21.1	19.0
Glen Oaks CC, IV				21.5
Gogebic CC, III				19.9
Grand Rapids Baptist C & Sem, IIA	20.6	18.2	15.0	
Grand Rapids JC, IV				24.7
Grand Valley St Colleges, IIA	30.7	25.2	20.2	
Great Lakes Bible C, IIB	13.3	—		
Highland Park CC, IV				27.4
Hillsdale C, IIB	31.4	24.8	21.5	17.0
Hope C, IIB	27.2	23.7	20.4	
Jackson CC				26.4
Kalamazoo C, IIB	32.6	24.9	19.1	—
Kirtland CC, IV				22.1
Lake Michigan C, III	26.6	23.9	20.5	18.1
Lake Superior St C, IIB	26.6	23.5	19.6	15.2
Lansing CC, III	24.0	21.9	20.0	17.8
Lawrence Inst of Tech, IIB	27.7	24.3	21.5	
Lewis C of Business, IV				19.3
Macomb County CC, IV				24.0
Madonna C, IIB	—		18.2	18.0
Marygrove C, IIA	23.2	14.9	16.2	13.4
Mercy C*, IIB	25.5	21.1	18.0	15.5
Mich Christian C, III		—	16.5	—
Michigan St U, I	35.6	27.7	23.0	15.8
Michigan Tech U, IIA	35.2	26.7	21.5	17.7
Mid Michigan CC, IV				19.7
Monroe County CC, III	30.4	27.8	25.8	—
Montcalm CC, IV				24.0
Muskegon Business C, IV				16.7
Muskegon CC, IV				28.2
[illegible] C, IIB	—	—	16.3	13.3
[illegible] Mich C, IV				22.7
N Michigan U, IIA	29.1	23.4	20.6	16.7
Northwood Inst, IIB			14.7	—
Oakland CC, IV				29.4
Oakland U, IIA	33.9	25.8	20.2	18.1
Olivet C, IIA	21.8	18.6	15.5	
Reformed Bible C, IIB	—	17.7	—	—
Schoolcraft C, IV				27.8
Shaw C at Detroit, IIB	—	16.2	14.1	12.6
Siena Heights C*, IIA		17.7	16.6	
SW Michigan C, IV				19.2
Spring Arbor C, IIB	19.8	17.4	15.2	
St Clair County CC, IV				26.3
Suomi C, IV				19.3
Thomas M Cooley Law Sch, IIA	45.7	35.2	—	
U of Detroit, I	30.8	26.7	21.2	
U of Michigan				
Ann Arbor, I	39.8	28.4	23.1	16.9
Dearborn, IIA	30.4	23.9	19.5	—
Flint, IIA	32.1	25.2	21.3	—
Washtenaw CC, IV				28.3
Wayne County CC, IV				25.2
Wayne St U, I	36.7	27.6	21.6	16.1
W Shore CC, IV				21.2
W Michigan U, I	31.1	24.5	20.4	15.6
Western Theol Sem, IIA	19.9		—	

MINNESOTA

	Prof	Assoc prof	Asst prof	Inst
Anoka-Ramsey CC, IV				23.5
Augsburg C, IIB	24.9	20.4	16.3	—
Austin CC, IV				25.0
Bemidji St U, IIA	30.7	26.3	21.0	16.9
Bethany Lutheran C, IV				15.4
Bethel C, IIB	25.9	21.9	18.6	15.6
Bethel Theol Sem, IIA	26.9	—	—	
Brainerd CC, IV				25.4
Carleton C, IIB	32.7	24.2	19.8	16.3
C of St Benedict*, IIB	24.5	21.0	17.7	14.5
C of St Catherine, IIB	29.6	22.9	18.9	16.0
C of St Scholastica*, IIB		21.3	17.6	16.2
C of St Teresa, IIB	20.1	19.2	17.5	14.0
C of St Thomas*, IIA	32.0	26.3	22.0	17.2
Concordia C				
Moorhead, IIB	27.9	23.8	19.6	15.7
St Paul, IIB	23.8	21.5	19.5	16.9
Dr Martin Luther C, IV				11.6
Fergus Falls CC, IV				25.3
Gustavus Adolphus C, IIB	26.5	22.8	17.7	—
Hamline U, IIB	28.4	21.2	17.8	
Hibbing CC, IV				23.2
Inver Hills CC, IV				23.7
Itasca CC, IV				23.0
Lakewood CC, IV				24.8
Luther Theol Sem, IIA	23.1	20.5	19.2	
Macalester C, IIB	31.2	24.4	19.0	16.4
Mesabi CC, IV				26.5
Metropolitan St U, IIB	—	20.5	15.4	—
Minneapolis C of Art & Design, IIB	26.3	22.1	18.5	—
Minneapolis CC, IV				24.4
Normandale CC, IV				22.6

MINNESOTA—Continued

	Prof	Assoc prof	Asst prof	Inst
N Central Bible C, IV				18.0
N Hennepin CC, IV				24.3
Northland CC, IV				26.4
Northwestern C, IIB	—	22.6	19.5	—
NW Lutheran Theol Sem, IIA	23.2		—	
Rainy River CC, IV				22.4
Rochester CC, IV				23.6
St Cloud St U, IIA	30.8	26.2	21.0	16.0
St John's U*, IIB	31.8	26.0	21.9	18.3
St Mary's C*, IIB	25.0	20.7	17.6	—
St Mary's JC*, III			17.1	—
St Olaf C, IIB	32.0	24.8	19.6	17.5
St Paul Bible C, IIB	—	18.7	16.8	14.3
St Paul Sem, IV				12.6
United Theol Sem, IIB	22.3			
U of Minnesota				
Duluth, IIA	30.2	23.3	19.1	17.6
Minneapolis-St Paul, I	32.4	24.5	20.5	18.0
Morris, IIB	29.7	22.3	17.6	15.1
Tech C at Crookston, III		22.0	20.0	16.1
Tech C at Waseca, III		23.0	19.7	17.4
Vermilion CC, IV				22.6
Willmar CC, IV				25.7
Winona St U, IIA	30.7	25.9	20.9	15.4
Worthington CC, IV				23.0

MISSISSIPPI

	Prof	Assoc prof	Asst prof	Inst
Alcorn St U, IIA	26.2	22.6	19.3	15.4
Belhaven C, IIB	—	—	15.3	
Blue Mountain C, IIB	—	13.8	13.5	
Coahoma JC, IV				16.5
Copiah-Lincoln JC, IV				16.8
Delta St U, IIA	26.7	21.9	19.0	15.7
E Central JC, IV				16.5
E Miss JC, IV				16.0
Hinds JC, IV				18.1
Holmes JC, IV				16.5
Itawamba JC, IV				16.4
Jones County JC, IV				18.1
Meridian JC, IV				17.1
Millsaps C, IIB	25.9	21.0	18.9	
Mississippi Delta JC, IV				17.7
Mississippi Gulf Coast JC, IV				18.2
Mississippi St U, I	31.6	25.1	20.8	15.9
Mississippi U for Women, IIA	26.2	22.5	19.4	16.2
Mississippi Valley St U, IIA	25.1	22.4	18.0	15.2
NE Miss JC, IV				17.3
NW Miss JC, IV				15.6
Pearl River JC, IV				15.8
Phillips C, IV				8.9
Prentiss Normal & Industrial Inst, IV				9.2
Reformed Theol Sem, IIA	23.0	—	—	
Rust C, IIB		—	—	12.5
SW Miss JC, IV				15.1
U of Mississippi, I	32.7	25.5	20.4	15.1
U of S Mississippi, I	32.0	25.7	20.6	16.5
Utica JC, IV				16.3
Wood JC, IV				10.6

MISSOURI

	Prof	Assoc prof	Asst prof	Inst
Assemblies of God Graduate Sch, IIA	24.8	—		
Avila C*, IIB	—	23.7	18.6	17.4
Cardinal Newman C, IIB			15.8	
Central Bible C, IIB	—	—	16.1	—
Central Methodist C, IIB	22.6	18.2	16.3	13.7
Central Mo St U, IIA	26.2	22.6	19.1	14.7
Christ Seminary Seminex, IIA	21.0			
Columbia C, IIB	21.9	18.5	15.3	
Concordia Sem, IIA	19.3	18.4	—	
Covenant Theol Sem, IIA	19.4		—	
Crowder C, IV				15.4
Drury C, IIA	25.4	19.6	15.7	12.0
E Central C, IV				18.8
Evangel C, IIB	22.9	19.2	16.6	13.0
Fontbonne C, IIA	—	16.1	13.5	12.1
Harris-Stowe St C, IIB	—	—	19.2	—
Jefferson C, IV				18.4
Kansas City Art Inst, IIB	26.2	19.9	16.7	
Lincoln U, IIA	22.8	20.7	16.5	14.5
Lindenwood C's, IIA	24.5	20.6	17.1	
Logan C of Chiropractic, IIA	—	—	20.3	11.5
Longview CC, IV				25.5
Maryville C, IIB	25.3	19.3	15.6	
Maple Woods CC, IV				25.5
Mo Baptist C, IIB	—	—	14.6	12.5
Missouri S St C, IIB	25.8	22.4	19.0	16.2
Mo Valley C, IIB	—	16.6	15.2	14.3
Missouri W St C, IIB	27.1	23.7	19.7	15.6
Moberly JC, IV				16.3
Nazarene Theol Sem, IIA	23.7	—	—	
NE Missouri St U, IIA	27.5	23.9	19.0	15.5
NW Missouri St U, IIA	26.6	21.9	18.4	16.1
Park C, IIB	19.9	—	15.4	
Rockhurst C, IIB	27.1	22.6	20.6	17.5
St Louis Christian C, IV	13.7			
St Louis C of Pharmacy, IIB	—	—	21.4	—
St Louis CC				
Florissant Valley, III	31.0	25.6	21.0	16.6
Forest Park, III	30.6	26.7	21.0	16.3
Meramec, III	30.5	26.0	20.6	16.6
St Louis U, I	31.4	23.7	19.8	18.0
Parks C, IIB	23.1	19.8	14.3	14.4
St Mary's C of O'Fallon, IV				12.6
St Paul's C, III	—	—	10.7	8.6
SE Missouri St U, IIA	27.7	22.4	19.1	14.4
SW Baptist C, IIB	22.6	18.4	15.9	14.0
SW Missouri St U, IIA	28.4	23.5	19.8	16.2
State Fair CC, IV				14.8
Stephens C, IV				17.8
Tarkio C, IIB		—	15.7	14.6
Three Rivers CC, IV				16.0

MISSOURI—Continued

	Prof	Assoc prof	Asst prof	Inst
Trenton JC, IV				15.0
U of Missouri, I	32.1	25.2	21.1	17.2
Kansas City, I	31.5	25.0	20.5	14.7
Rolla, I	32.3	25.6	21.8	—
St Louis, I	34.0	25.3	20.8	14.9
Washington U, I	37.0	27.3	22.4	18.6
Webster C, IIA	24.6	20.6	17.6	—
Westminster C, IIB	24.5	19.9	17.1	—
William Jewell C, IIB	25.1	20.5	17.8	15.8
William Woods C, IIB	22.9	19.4	16.7	14.3

MONTANA

	Prof	Assoc prof	Asst prof	Inst
Big Sky Bible C, IIB				14.7
Carroll C*, IIB	25.5	20.1	17.0	—
C of Great Falls*, IIB	21.9	18.0	16.8	—
Dawson CC, IV				21.0
Miles CC, IV				19.4
Montana C of Mineral Science & Tech, IIA	32.6	26.5	21.8	
Montana St U, I	30.4	24.7	21.1	17.1
Rocky Mountain C, IIB	20.5	17.2	14.8	—
U of Montana, I	28.2	22.4	19.5	17.4
W Montana C, IIA	27.0	22.3	18.1	

NEBRASKA

	Prof	Assoc prof	Asst prof	Inst
Bellevue C, IIB		15.7	13.0	
Central Tech CC Area, IV				15.8
Chadron St C, IIA	26.4	24.0	19.6	15.6
C of St Mary, IIB		18.7	16.3	16.0
Concordia Teachers C, IIA	21.9	19.3	16.6	12.8
Creighton U, IIA	32.4	27.1	20.3	15.6
Dana C, IIB	20.7	18.0	17.3	15.4
Doane C, IIB	22.1	19.1	16.8	14.5
Grace C of the Bible, IV				15.7
Hastings C, IIB	23.7	19.9	17.2	15.0
Kearney St C, IIA	26.2	21.8	19.2	15.4
McCook CC, IV				18.8
Metropolitan Tech CC, IV				16.9
Mid Plains CC, IV				19.3
Midland Lutheran C, IIB	21.7	—	16.6	14.6
Neb Wesleyan U, IIB	22.8	19.4	16.4	—
Neb Western C, IV				21.9
NE Tech CC, IV				17.8
Peru St C, IIB	28.0	23.5	20.2	16.6
Southeast CC				
Fairbury-Beatrice, IV				17.2
Lincoln, IV				15.9
Milford, IV				16.8
U of Nebraska				
Lincoln, I	33.1	25.6	21.5	15.3
Omaha, IIA	27.3	23.0	18.4	16.6
Wayne St C, IIA	27.2	23.2	18.7	14.7
York C, III		—	13.3	

NEVADA

	Prof	Assoc prof	Asst prof	Inst
Clark County CC, IV				21.7
Northern Nev CC, IV				21.5
U of Nevada				
Las Vegas, IIA	34.7	27.4	23.2	20.2
Reno, I	35.2	27.5	21.8	20.1
W Nevada CC, IV				20.8

NEW HAMPSHIRE

	Prof	Assoc prof	Asst prof	Inst
Daniel Webster C, III	—	21.3	18.3	15.5
Dartmouth C, I	37.4	26.5	21.7	17.7
Franklin Pierce C, IIA	21.5	19.0	—	
Franklin Pierce Law Center, IIA	35.9			
Nathaniel Hawthorne C, IIB			16.5	11.8
New England C, IIB	23.4	21.5	16.1	—
New Hampshire C, IIA	—	23.2	20.5	16.8
NH Tech Inst, III	21.9	—	15.6	14.2
NH Voc-Tech C				
Berlin, III	20.9	17.5	—	—
Claremont, III	—	17.3	15.4	12.2
Laconia, III	—	15.9	—	
Manchester, III	20.8	17.4		
Nashua, III	19.2	—		
Portsmouth, III		16.5		
Notre Dame C*, IIB	—	—	13.7	—
Rivier C, IIA	—	19.6	15.8	13.8
St Anselm C*, IIB	25.7	21.8	18.3	15.0
U of New Hampshire, I	32.6	25.4	20.0	16.2
Keene St C, IIA	26.2	22.4	19.2	15.7
Plymouth St C, IIA	27.3	22.5	19.6	16.3

NEW JERSEY

	Prof	Assoc prof	Asst prof	Inst
Atlantic CC, III	27.9	24.8	21.6	16.4
Bergen CC, III	33.3	27.9	23.2	18.5
Berkeley Sch, IV				15.5
Bloomfield C, IIB	26.8	21.5	18.8	17.8
Brookdale CC, III	32.4	28.3	22.7	16.8
Burlington County C, III	28.5	24.7	21.0	18.0
Caldwell C, IIB	16.0	16.5		9.9
Camden County C, III	29.1	26.7	22.0	
Centenary C, IIB	23.3	—	16.4	13.2
C of St Elizabeth, IIB		—	10.6	
County C of Morris, III	30.9	26.2	21.7	18.6
Cumberland County C, III	—	25.1	22.7	17.6
Drew U, IIA	33.5	25.4	19.4	17.1
Essex County C, III	34.2	27.5	23.5	18.7
Fairleigh Dickinson U				
Florham-Madison, IIA	33.7	27.2	21.4	—
Rutherford, IIA	33.7	27.4	22.7	16.8
Teaneck, IIA	38.2	28.7	21.7	16.5
Felician C, IIB	—	16.7	14.7	13.9
Georgian Court C*, IIB	—	20.8	20.0	15.7
Glassboro St C, IIA	33.5	26.7	21.7	17.8
Gloucester County C, III	—	25.2	22.8	21.2
Jersey City St C, IIA	35.7	28.6	22.6	17.5
Kean C, IIA	34.6	27.5	21.7	16.9
Mercer County CC, III	30.5	25.5	21.0	16.5
Monmouth C, IIA	30.3	25.1	20.6	15.6
Ocean County C, III	33.3	28.3	21.5	16.0
Passaic County CC, III	31.6	—	17.3	13.6
Princeton Theol Sem, IIA	35.0		24.2	—
Princeton U, I	42.0	27.5	21.0	17.8

NEW JERSEY—Continued

	Prof	Assoc prof	Asst prof	Inst
Ramapo C, IIB	30.9	26.3	21.0	
Rider C, IIA	32.7	25.2	20.4	18.5
St Peter's C, IIB	26.8	22.0	17.6	15.4
Salem CC, III	—	22.7	19.8	15.6
Stevens Inst of Tech, I	37.4	28.2	24.7	—
Stockton St C, IIB	30.9	24.5	19.1	16.0
Trenton St C, IIA	34.1	27.5	21.9	17.4
Union C, III	31.6	24.2	17.3	—
Union County Tech Inst, IV				20.3
Upsala C, IIA	27.9	23.4	18.3	—
Westminster Choir C, IIA	24.4	21.6	17.6	13.2
William Paterson C, IIA	32.7	26.0	20.5	16.2

NEW MEXICO

	Prof	Assoc prof	Asst prof	Inst
C of the Southwest, IV				17.5
E New Mexico U, IIA	31.6	26.4	22.4	17.5
NM Highlands U, IIA	27.6	22.4	19.1	15.7
NM Inst of Mining & Tech, I	31.8	26.8	21.0	
New Mexico JC, IV				23.7
NM Military Inst, III	—	22.9	20.4	17.5
New Mexico St U, I	34.4	25.8	20.8	16.3
St John's C, IV				22.9
U of Albuquerque*, IIB	—	16.6	12.9	12.0
U of New Mexico, I	34.4	25.6	20.6	17.2
Gallup, IV				18.6
W New Mexico U, IIA	32.2	27.0	21.1	15.5

NEW YORK

	Prof	Assoc prof	Asst prof	Inst
Acad of Aeronautics, III	19.5	17.1	14.3	13.2
Adelphi U, I	35.0	26.9	22.2	18.8
Albany C of Pharmacy, IIB	32.4	26.8	—	—
Alfred U, IIA	28.2	21.8	17.8	15.1
NY St C of Ceramics, IIA	30.8	23.7	16.5	
Bard C, IIB	28.2	23.3	19.2	
Barnard C, IIB	38.8	26.8	19.9	15.9
Berkeley Sch, IV				12.8
Hicksville, IV				14.1
New York, IV				12.8
Brooklyn Law Sch, IIA	49.8	—	—	20.6
Bryant-Stratton Insts Powelson, IV				10.8
Canisius C, IIA	30.0	25.1	20.3	—
Cazenovia C, III	—	—	—	11.5
City U of NY				
Baruch C, IIA	40.9	32.4	25.8	21.2
Borough of Manhattan CC, III	39.8	32.8	27.6	19.4
Bronx CC, III	40.8	33.5	28.8	—
Brooklyn C, IIA	41.2	32.9	25.9	19.3
City C, IIA	42.0	33.9	27.2	22.4
Graduate Sch & U Center, I	42.5	30.2	—	
Hostos CC, III	40.1	34.0	27.2	18.1
Hunter C, IIA	41.0	33.1	24.8	19.4
John Jay C of Criminal Justice, IIA	39.1	31.6	25.4	22.8
Kingsboro CC, III	41.5	34.1	28.3	—
La Guardia CC, III	35.1	29.6	23.1	18.5
Lehman C, IIA	41.3	33.6	26.6	20.5
Medgar Evers C, IIB	38.6	29.9	23.8	19.1
New York City Tech C, III	40.9	33.4	26.9	18.1
Queens C, IIA	41.5	33.1	26.8	19.6
Queensborough CC, III	39.3	33.1	26.8	18.6
C of Staten Island, III	41.3	34.4	28.8	
York C, IIB	41.7	32.7	25.9	20.3
Clarkson C of Tech, IIA	37.5	28.5	22.8	19.2
Colgate U, IIA	38.1	27.9	20.2	15.6
C of Insurance, IIA	—	23.4	18.5	—
C of Mt St Vincent, IIB	—	20.1	17.5	14.9
C of New Rochelle, IIA	28.2	22.7	20.0	15.7
C of St Rose, IIA	26.8	20.9	17.7	15.4
Columbia U, I	42.1	30.4	21.8	—
Teachers C, I	37.4	27.8	20.7	16.3
Concordia C, IIB	21.6	—	15.3	—
Cooper Union, IIA	32.6	26.6	22.1	
Cornell U				
Endowed C's, I	39.7	27.9	22.8	17.9
Statutory C's, I	36.2	27.4	23.1	18.0
Culinary Inst of America, IV				20.9
Daemen C, IIB	22.2	18.1	16.0	
Dominican C, IIB	—	19.4	17.5	13.6
Dowling C, IIA	31.3	24.4	21.0	17.4
D'Youville C, IIB	—	19.7	15.3	13.9
Elizabeth Seton C, III	—	22.7	16.2	13.8
Elmira C, IIB	28.4	21.1	17.7	
Friends World C, IV				14.2
Hamilton C, IIB	35.5	27.3	19.5	16.4
Hartwick C, IIB	26.8	23.4	18.1	15.5
Hilbert C, IV	—	—	—	13.7
Hofstra U, I	33.0	26.6	21.8	18.1
Houghton C, IIB	20.0	17.7	15.7	—
Iona C, IIA	34.2	27.7	23.2	18.0
Ithaca C, IIB	29.5	24.1	19.6	15.1
Keuka C, IIB	20.4	16.9	14.7	14.3
King's C, IIB	21.9	—	16.5	—
Le Moyne C, IIB	28.7	22.6	18.4	16.4
Long Island U, IIA	30.0	24.8	19.8	16.4
Manhattan C, IIA	35.5	28.3	21.9	16.5
Manhattan Sch of Music, IV				14.5
Manhattanville C, IIA	25.2	21.1	15.7	13.9
Maria C, III	—	—	12.9	11.4
Marist C, IIB	27.2	24.0	19.9	—
Maryknoll Sch of Theol, IIA	14.6	—	—	
Marymount C, IIB	24.7	20.4	18.7	14.0
Marymount Manhattan C, IIB	—	24.8	20.5	—
Mater Dei C, III		—		10.8
Medaille C, IIB	—	17.7	15.7	14.0
Mercy C, IIB	31.8	25.0	20.2	14.9
Molloy C, IIB	25.0	20.5	16.7	12.5
Monroe Business Inst, IV				13.8
Mt St Mary C, IIB	24.9	19.4	16.6	12.7
Nazareth C of Rochester, IIA	28.7	23.2	19.2	16.7

NEW YORK—Continued

	Prof	Assoc prof	Asst prof	Inst
New Sch for Social Research, I	42.9	26.4	20.5	
New York Inst of Tech, IIA	32.8	26.1	20.8	16.3
NY Law Sch, IIA	46.8	36.5		
New York U, I	42.3	29.8	23.8	21.4
Niagara U, IIA	27.1	21.6	17.8	14.6
Olean Business Inst, IV				10.3
Pace U, IIA	33.6	28.0	22.8	17.8
Parsons Sch of Design, IIB				23.0
Paul Smith's C of Arts & Sci, III	22.3	19.7	16.2	13.6
Poly Inst of New York, I	35.5	27.2	21.5	
Pratt Inst, IIA	29.0	22.7	19.1	—
Rensselaer Poly Inst, I	39.5	29.0	23.8	—
Rochester Business Inst, IV				10.9
Rockefeller U, I	50.4	29.6	21.5	18.0
Russell Sage C, IIA	30.9	23.6	18.5	17.7
St Bonaventure U, IIA	27.2	22.4	18.4	15.9
St Francis C, IIB	32.4	25.3	19.9	—
St John Fisher C, IIB	28.7	23.2	19.6	17.0
St Joseph's C, IIB	21.8	19.4	16.4	13.5
St Lawrence U, IIB	33.0	25.2	19.3	16.9
Sarah Lawrence C, IV				26.5
Sch of Visual Arts, IV				21.0
Siena C, IIB	29.8	22.3	18.4	—
Skidmore C, IIB	32.8	23.9	19.1	16.9
St U of New York				
Albany, I	41.1	29.7	22.4	—
Binghamton, I	39.9	29.2	21.7	14.8
Buffalo				
Main Campus, I	41.7	29.1	22.3	—
Stony Brook				
Main Campus, I	41.4	28.1	21.1	—
St U of New York				
Ag & Tech C				
Alfred, III	29.0	25.1	20.8	16.4
Canton, III	27.7	21.6	19.0	15.5
Cobleskill, III	27.1	22.4	19.2	17.4
Delhi, III	27.6	21.7	17.9	13.4
Farmingdale, III	30.2	23.8	19.8	16.5
Morrisville, III	27.8	23.0	19.2	16.7
St U of New York C				
Brockport, IIA	33.2	26.5	21.7	16.3
Buffalo, IIA	32.2	25.1	20.7	17.2
Cortland, IIA	31.5	24.9	19.9	14.6
Fredonia, IIA	31.5	25.4	20.5	16.5
Geneseo, IIA	34.1	26.4	19.6	16.1
New Paltz, IIA	31.1	25.2	21.1	16.1
Old Westbury, IIA	32.8	24.7	18.4	16.6
Oneonta, IIA	32.0	25.6	20.5	—
Oswego, IIA	33.1	24.4	19.7	17.1
Plattsburgh, IIA	31.5	26.5	20.6	17.0
Potsdam, IIA	25.7	25.6	20.6	15.8
Purchase, IIA	31.9	24.2	19.3	16.9
St U of New York C				
of Tech Utica-Rome, IIA	—	26.1	19.5	—
of Environmental Science & Forestry, I	30.9	24.8	20.7	
of Optometry, IIA	—	30.1	26.5	—
St U of New York CC				
Clinton, III	—	19.7	16.1	
Corning, III	28.6	23.4	18.2	15.5
Finger Lakes, III	22.7	20.0	17.2	14.1
Dutchess, III	33.0	27.5	21.8	15.6
Jamestown, III	28.4	23.2	19.8	14.8
Monroe, III	31.1	25.9	21.3	17.0
Tompkins-Cortland, III	25.8	20.8	16.9	14.8
Ulster County, III	28.3	24.4	21.2	17.9
St U of New York				
Empire St C, IIB	30.0	25.4	20.5	19.2
Maritime C, IIB	32.7	23.1	19.6	—
Syracuse U, I	34.8	25.4	20.3	16.1
Utica C, IIB	25.6	21.2	17.3	—
Tech Career Insts, IV				17.6
Trocaire C, III	—	—	16.5	13.4
Union C, IIA	33.6	25.2	18.4	16.7
Union Theol Sem, IIA	20.6	—	11.3	
US Merchant Marine Acad, IIB	41.6	33.1	24.9	—
Vassar C, IIB	35.1	25.5	19.5	17.2
Villa Maria C, III		—	—	12.2
Wagner C, IIA	31.6	25.0	20.0	16.0
Wells C, IIB	23.5	20.4	16.6	—
Wood Sch, IV				13.6

NORTH CAROLINA

	Prof	Assoc prof	Asst prof	Inst
Anson Tech C, IV				13.2
Appalachian St U, IIA	29.3	24.1	21.8	18.0
Asheville Buncombe Tech C, IV				17.5
Atlantic Christian C, IIB	22.4	18.5	16.1	13.9
Barber-Scotia C, IIB	—	—	14.5	13.1
Beaufort County CC, IV				15.0
Belmont Abbey C*, IIB	—	17.4	15.7	14.0
Bennett C, IIB	20.1	16.8	15.7	13.7
Bladen Tech Inst, IV				13.0
Blue Ridge Tech C, IV				16.0
Brunswick Tech C, IV				14.2
Caldwell CC & Tech Inst, IV				14.2
Cape Fear Tech Inst, IV				16.9
Carteret Tech Inst, IV				14.5
Catawba C, IIB	20.3	16.9	15.1	13.1
Catawba Valley Tech C, IV				17.1
Central Carolina Tech C, IV				15.6
Central Piedmont CC, IV				19.5
Chowan C, IV				16.7
Cleveland Tech C, IV				15.3
Coastal Carolina CC, IV				15.5
C of the Albemarle, III		17.2	13.8	11.6
Craven CC, IV				18.8
Davidson C, IIB	32.6	25.6	20.2	17.3
Davidson County CC, IV				18.3
Duke U, I	38.1	27.8	22.6	—
Durham Tech Inst, IV				14.9
E Carolina U, IIA	31.5	26.1	21.2	18.4

NORTH CAROLINA—Continued

	Prof	Assoc prof	Asst prof	Inst
Edgecombe Tech C, IV				13.6
Elizabeth City St U, IIB	29.7	23.7	21.5	18.7
Elon C, IIB	25.2	19.6	17.2	15.0
Fayetteville St U, IIB	31.0	26.3	21.3	17.4
Fayetteville Tech Inst, IV				17.7
Forsyth Tech Inst, IV				17.5
Gardner-Webb C, IIB	20.4	16.9	16.5	13.7
Gaston C, IV				16.1
Greensboro C, IIB	21.8	19.5	17.1	14.9
Guilford C, IIB	26.1	20.9	16.8	—
Guilford Tech Inst, IV				17.0
Halifax CC, IV				15.1
Haywood Tech C, IV				14.6
High Point C, IIB	20.9	18.1	15.6	13.1
Isothermal CC, IV				15.7
James Sprunt Tech C, IV				14.1
Johnson Smith U, IIB	21.4	19.4	16.6	14.2
Johnston Tech C, IV				14.0
Lees-McCrae C, IV				14.8
Lenoir-Rhyne C, IIB	22.0	18.4	15.9	13.8
Livingstone C, IIB	—	16.7	14.9	12.1
Louisburg C, III	18.2	—	—	13.3
McDowell Tech Inst, IV				14.6
Mars Hill C, IIB	20.5	17.9	16.0	12.6
Martin CC, IV				15.2
Mayland Tech C, IV				14.5
Meredith C, IIB	24.6	20.1	16.4	14.9
Methodist C, IIB	17.1	16.1	15.4	—
Mitchell CC, IV				15.0
Montgomery Tech Inst, IV				13.7
Montreat-Anderson C, IV				15.0
Mt Olive C, IV	16.2			
Nash Tech Inst, IV				14.9
North Carolina Ag & Tech St U, IIA	30.7	26.1	26.0	17.4
NC Central U, IIA	31.1	25.6	21.6	17.7
NC Sch of the Arts, IV				21.3
NC St U at Raleigh, I	38.1	28.1	23.1	16.5
NC Wesleyan C, IIB	21.4	18.1	15.4	—
Pamlico Tech C, IV				15.3
Peace C, IV				17.3
Pembroke St U, IIB	29.9	24.9	22.2	18.0
Pfeiffer C, IIB	20.6	16.7	16.4	11.8
Piedmont Bible C, IIB				10.9
Pitt CC, IV				14.9
Queens C, IIB	22.9	20.3	15.1	—
Randolph Tech C, IV				15.1
Richmond Tech C, IV				17.4
Roanoke-Chowan Tech C, IV				15.3
Robeson Tech C, IV				16.8
Rockingham CC, IV				16.6
Rowan Tech C, IV				17.3
Sacred Heart C, IIB	—	—	14.6	
St Andrew's Presbyterian C, IIB	22.9	21.9	17.2	15.6
St Augustine's C, IIB	19.0	17.5	14.9	12.0
St Mary's C, III	—	18.1	14.7	12.3
Salem C, IIB	23.1	19.0	16.9	—
Sampson Tech C, IV				14.0
Sandhills CC, IV				15.6
Shaw U, IIB	22.6	20.1	16.6	12.8
SE Baptist Theol Sem, IIA	24.3	17.9	—	
Southeastern CC, IV				14.4
SW Tech C, IV				15.5
Stanly Tech C, IV				12.4
Surry CC, IV				15.1
Tech C of Alamance, IV				17.0
Tri-County CC, IV				14.0
U of North Carolina				
Asheville, IIB	30.4	25.8	21.2	
Chapel Hill, I	41.5	29.5	24.3	21.0
Charlotte, IIA	33.3	26.3	21.6	17.5
Greensboro, I	38.5	27.9	22.2	18.0
Wilmington, IIB	30.6	25.0	21.3	17.6
Vance-Granville CC, IV				15.7
Wake Forest U, IIA	33.4	27.0	21.6	15.4
Wake Tech C, IV				15.7
Warren Wilson C, IV				11.6
Wayne CC, IV				16.2
W Carolina U, IIA	30.6	25.2	21.0	15.9
W Piedmont CC, IV				15.5
Wilkes CC, IV				17.2
Wilson County Tech Inst, IV				16.0
Wingate C, IIB	22.1	18.8	17.1	16.8
Winston Salem St U, IIB	28.9	24.8	22.1	15.8

NORTH DAKOTA

	Prof	Assoc prof	Asst prof	Inst
Dickinson St C, IIB	26.9	24.3	21.5	18.8
Jamestown C, IIB	26.0	—	20.3	—
Lake Region CC, IV				18.2
Mayville St C, IIB	29.3	26.0	20.0	—
North Dakota St Sch of Science, IV				22.5
North Dakota St U, I	31.8	22.9	20.8	17.2
Bottineau, IV				23.1
Standing Rock CC, IV				18.4
Trinity Bible Inst, IV				10.2
U of North Dakota, I	31.6	25.8	21.5	18.7
Williston, IV				19.3
Valley City St C, IIB	30.7	24.6	22.4	—

OHIO

	Prof	Assoc prof	Asst prof	Inst
Air Force Inst of Tech, I	37.8	32.9	32.9	
Ashland C, IIB	27.2	23.5	20.1	15.6
Baldwin-Wallace C, IIB	30.4	22.0	18.1	
Belmont Tech C, III			—	16.4
Bluffton C, IIB	20.2	16.8	15.1	—
Bowling Green St U, I	34.1	26.6	20.9	17.2
Firelands, III		25.7	19.8	16.3
Capital U, IIB	26.1	18.7	16.8	13.6
Case Western Reserve U, I	36.7	27.1	21.6	19.2
Cedarville C, IIB	22.7	19.6	17.3	—
Central Ohio Tech C, IV				18.3
Cincinnati Bible Sem, IIB	20.0			

OHIO—Continued

	Prof	Assoc prof	Asst prof	Inst
Circleville Bible C, IIB	9.4		—	
Clark Tech C, III		22.3	19.9	16.7
Cleveland St U, IIA	36.8	27.2	22.7	18.5
C of Mt St Joseph, IIB	21.2	18.5	15.6	14.3
C of Wooster, IIB	28.4	23.9	19.1	15.5
Columbus C of Art & Design, IIB	—	21.5	16.5	18.2
Columbus Tech Inst, IV				18.0
Cuyahoga CC, IV				27.2
Defiance C, IIB	21.1	18.6	17.5	—
Denison U, IIB	29.7	19.8	18.7	16.3
Dyke C, IIB			14.7	12.7
Edison St CC, IV				20.3
Findlay C, IIB	24.3	20.4	17.4	14.5
Franklin U, IV				20.8
Hebrew Union C, I	43.3	28.2	—	
Heidelberg C, IIB	23.1	18.0	15.8	—
Hiram C, IIB	26.8	20.8	17.0	13.5
Jefferson Tech C, III		20.5		15.3
John Carroll U*, IIA	27.5	23.2	20.0	20.7
Kent St U, I	30.9	23.7	20.1	16.4
Ashtabula, III		—	19.3	15.2
E Liverpool, III			17.0	
Salem, III		23.0	19.5	
Stark County, III		23.0	20.6	—
Trumbull, III		22.6	18.9	—
Tuscarawas, III		22.2	19.2	—
Kenyon C, IIB	34.1	25.9	20.1	15.9
Kettering C of Medical Arts, III	—	—	16.3	15.3
Lakeland CC, IV				26.5
Lima Tech C, III			21.4	17.6
Lorain County CC, III	29.4	28.0	22.4	17.7
Malone C, IIB	21.1	17.5	15.4	—
Marietta C, IIB	25.8	20.7	19.2	—
Marion Tech C, IV				19.3
Miami-Jacobs JC of Business, IV				9.1
Miami U, I	34.0	25.8	20.6	18.1
Hamilton, III		24.9	19.3	17.9
Middletown, III		23.5	19.8	21.3
Michael J Owens Tech C, III	25.5	21.8	19.5	16.8
Mt Union C, IIB	26.1	20.5	18.2	14.9
Mt Vernon Nazarene C, IIB	21.0	18.0	15.5	—
Muskingum Area Tech C, III		20.1	18.8	18.0
Muskingum C, IIB	25.8	20.5	17.5	14.4
N Central Tech C, III		19.8	17.6	15.9
NW Tech C, IV				16.3
Notre Dame C*, IIB			—	11.5
Oberlin C, IIB	34.9	25.9	20.0	17.0
Ohio Dominican C, IIB	22.0	19.3	16.1	12.1
Ohio Northern U, IIB	27.4	22.5	19.7	16.7
Ohio St U, I	38.6	28.9	23.8	17.9
Ohio U, I	31.4	24.6	20.2	15.9
Belmont, III		24.5	21.1	
Chillicothe, III		—	19.8	
Lancaster, III		23.0	19.2	16.0
Zanesville, III		21.5	18.7	—
Ohio Wesleyan U, IIB	29.4	22.9	19.0	—
Otterbein C, IIB	26.0	19.8	16.5	15.3
Pontifical C Josephinum, IIA	—	10.7	5.7	
Rio Grande C, IIB	—	19.7	19.1	14.8
Shawnee St CC, III		23.1	19.2	16.1
Sinclair CC, III	23.7	19.0	16.3	14.2
S Ohio C, IV				11.2
Southern St CC, III		17.7	15.8	12.8
Stark Tech C, III		25.4	21.3	16.5
Terra Tech C, IV				18.2
Tiffin U, IIB			—	13.8
Trinity Lutheran Sem, IIA	23.0	—	—	
United Theol Sem, IIA	22.0	—	—	
U of Akron, I	34.0	27.1	21.9	18.2
Wayne General & Tech C, III			17.4	—
U of Cincinnati, I	36.4	27.5	21.9	16.1
Clermont General & Tech C, III		—	21.1	—
Raymond Walters C, III	—	25.5	20.0	15.3
U of Dayton, IIA	29.1	25.1	20.1	15.3
U of Steubenville*, IIB	22.2	18.4	14.3	12.5
U of Toledo, I	33.1	26.0	21.9	18.5
Ursuline C, IIB	19.6	—	15.8	15.8
Walsh C, IIB	20.7	17.5		
Washington Tech C, IV				15.9
Wilberforce U, IIB	—	18.2	15.5	13.7
Wilmington C, IIB	21.3	18.7	15.3	—
Wittenberg U, IIB	29.4	24.2	19.8	18.4
Wright St U, IIA	31.0	24.2	19.4	16.0
W Ohio, IIA		—	18.7	16.1
Xavier U, IIA	29.4	24.1	19.9	16.4
Youngstown St U, IIA	32.7	27.2	22.2	17.1

OKLAHOMA

	Prof	Assoc prof	Asst prof	Inst
Bacone C, III		-	16.7	—
Bartlesville Wesleyan C, IV				16.4
Bethany Nazarene C, IIA	21.2	19.3	17.9	15.2
Cameron U, IIB	28.2	25.5	22.0	18.5
Carl Albert JC, IV				20.6
Central St U, IIA	30.4	27.7	24.9	20.4
Claremore JC, IV				21.4
Connors St C, IV				21.2
E Central Okla St U, IIA	28.1	26.1	23.5	18.8
E Okla St C, IV				21.7
El Reno JC, IV				21.5
Langston U, IIB	26.7	24.8	25.3	19.1
Murray St C, IV				21.5
NE Okla A&M C, IV				21.8
NE Okla St U, IIA	28.4	24.2	20.8	18.3
N Okla C, IV				20.9
NW Okla St U, IIA	29.4	26.3	22.8	17.6
Okla Baptist U, IIB	23.9	20.7	17.3	14.4
Okla Christian C, IIB	25.2	22.9	20.0	15.1
Oklahoma City U, IIA	27.4	19.1	18.0	14.2
Okla Panhandle St U, IIB	26.1	24.1	—	19.1
Oklahoma St U, I	33.3	25.8	21.8	16.3
Tech Inst, III		24.1	20.7	18.1
Oscar Rose JC, IV				21.5
Phillips U, IIA	21.7	18.7	16.6	—
St Gregory's C*, IV				17.7
Sayre JC, IV				20.2
Seminole JC, IV				20.5
S Okla City JC, IV				21.4
SE Okla St U, IIA	27.4	23.8	21.2	17.6
SW Okla St U, IIA	30.1	27.9	25.6	19.6
Tulsa JC, IV				21.9
U of Oklahoma, I	34.0	26.3	20.9	13.2

OKLAHOMA—Continued

	Prof	Assoc prof	Asst prof	Inst
U of Science & Arts of Oklahoma, IIB	—	27.0	23.9	20.0
U of Tulsa, I	32.6	25.9	20.4	16.8
W Okla St C, IV				21.5

OREGON

	Prof	Assoc prof	Asst prof	Inst
Bassist C, IV				14.5
Blue Mountain CC, IV				23.2
Central Oregon CC, III	28.9	23.6	21.4	18.4
Chemeketa CC, IV				21.6
Concordia C, III	18.2	—	9.7	—
E Oregon St C, IIA	28.5	22.3	19.0	—
George Fox C, IIB	23.6	20.4	16.8	
Lane CC, IV				21.8
Lewis & Clark C, IIA	34.7	25.4	20.1	—
Linfield C, IIA	24.0	29.3	16.0	
Mt Angel Sem, IIA				7.8
Mt Hood CC, IV				24.5
Oregon St U, I	31.8	24.9	20.7	15.3
Pacific NW C of Art, IV				15.8
Pacific U, IIA	27.9	21.6	18.0	
Portland CC, IV				22.8
Portland St U, IIA	29.6	23.6	20.6	16.3
Reed C, IIA	33.1	24.9	20.6	
Rogue CC, IV				20.3
S Oregon St C, IIA	27.0	22.8	18.7	—
SW Oregon CC, III	30.0	24.9	20.8	—
Treasure Valley CC, IV				18.7
Umpqua CC, IV				22.7
U of Oregon, I	33.0	24.8	20.2	16.8
U of Portland, IIA	24.3	21.6	18.8	
Warner Pacific C, IIA	—	17.5	15.5	
W Baptist C, IIB	—	14.7		—
W Conservative Baptist Sem, IIA	23.2	20.7	19.1	
W Evangelical Sem, IIA	20.3			
W Oregon St C, IIA	27.0	21.7	20.2	16.8
W States Chiropractic C, IIA	—	—	18.8	—
Willamette U, IIA	31.3	23.5	19.2	

PENNSYLVANIA

	Prof	Assoc prof	Asst prof	Inst
Acad of the New Church, IIA	—	23.7	23.4	—
Albright C, IIB	29.4	23.7	19.8	17.3
Allegheny C, IIB	29.5	22.4	17.3	14.4
Allentown C of St Francis de Sales, IIB	—	19.9	16.0	15.4
Alvernia C*, IIB		—	—	11.0
Art Inst of Pittsburgh, IV				14.6
Baptist Bible C of Pa, IIA	—	17.9	—	13.2
Beaver C, IIB	28.2	21.3	16.4	—
Berean Inst, IV				11.5
Bloomsburg St C, IIA	33.4	27.5	21.1	16.4
Bryn Mawr C, I	32.6	25.4	20.7	
Bucknell U, IIA	35.3	26.8	20.6	19.8
Bucks County CC, III	27.5	23.6	17.0	—
Butler County CC, III	27.9	24.9	21.6	—
Cabrini C*, IIB	—	20.6	19.1	—
California St C, IIA	33.6	27.6	22.5	—
Carlow C*, IIB	26.8	20.5	16.7	14.2
Cedar Crest C, IIB	25.3	18.9	16.4	—
Center for Degree Studies, IV				12.6
Central Pa Business Sch, IV				10.5
Cheyney St C, IIB	33.8	27.9	23.0	19.0
Clarion St C, IIA	32.7	27.5	21.9	17.8
Venango, III	—	—	22.4	—
C Misericordia, IIB	—	19.0	16.7	14.3
CC of Allegheny County, III	24.7	22.6	19.6	—
CC of Beaver County, III	—	22.3	19.8	15.7
CC of Philadelphia, III	32.0	28.6	23.8	19.4
Del Valley C of Science & Agriculture, IIB	25.3	22.2	19.4	16.3
Dickinson C, IIB	29.5	23.4	18.2	16.6
Dickinson Sch of Law, IIA	39.8	—	—	
Drexel U, IIA	37.1	26.9	21.9	17.5
Duquesne U*, IIA	31.1	23.9	19.9	15.9
E Stroudsburg St C, IIA	33.4	26.8	21.8	—
E Baptist Theol Sem, IIA	25.5	—	—	
Eastern C, IIB	25.0	20.6	17.0	
Edinboro St C, IIA	33.7	27.7	22.5	—
Elizabethtown C, IIB	27.0	23.5	20.2	—
Franklin & Marshall C, IIB	34.4	26.0	19.1	16.1
Gannon U, IIA	25.4	22.4	20.1	15.6
Geneva C, IIB	26.0	22.1	17.5	—
Gettysburg C, IIB	32.3	24.5	18.9	17.4
Harcum JC, III	—	18.2	14.9	11.5
Harrisburg Area CC, III	26.4	22.2	18.6	14.7
Haverford C, IIB	32.7	24.7	19.5	16.9
Immaculata C*, IIB	24.6	23.7	—	
Indiana U of Pa, I	33.5	27.0	21.9	15.4
Juniata C, IIB	30.2	22.8	19.8	—
Keystone JC, IV				17.1
King's C, IIB	25.3	21.8	19.4	—
Kutztown St C, IIA	33.0	27.5	22.3	17.8
Lackawanna JC, III		—		9.4
Lafayette C, IIB	36.0	26.2	21.5	19.5
Lancaster Bible C, III	—	14.4	14.0	—
Lancaster Theol Sem, IIA	14.2			
La Roche C, IIB	—	20.2	17.5	—
La Salle C, IIB	33.6	27.2	21.7	18.4
Lebanon Valley C, IIB	25.1	20.9	17.0	—
Lehigh County CC, III	26.4	22.1	20.5	16.1
Lehigh U, I	36.8	27.1	22.4	21.2
Lincoln U, IIB	26.3	21.5	17.8	14.9
Lock Haven St C, IIB	33.4	27.5	22.6	17.6
Lutheran Theol Sem				
Gettysburg, IIA	19.3	—	—	—
Philadelphia, IIA	26.1	—	—	
Luzerne County CC, III	23.5	20.7	18.5	13.6
Lycoming C, IIB	27.0	21.5	18.0	15.3
McCarrie Sch of Health Science, IV				11.7
Manor JC, IV				13.9
Mansfield St C, IIA	33.1	27.6	21.6	15.8
Marywood C, IIA	24.8	21.4	19.1	16.7
Mercyhurst C, IIB	23.6	19.7	17.2	14.6
Messiah C, IIB	24.7	22.3	19.9	—
Millersville St C, IIA	33.5	27.2	22.0	17.9
Montgomery County CC, III	28.8	24.8	19.9	16.2
Moore C of Art, IIB	19.4	17.7	16.4	—
Moravian C, IIB	28.2	22.3	18.6	—
Mt Aloysius JC, III		16.4	16.0	13.8
Muhlenberg C, IIB	29.1	23.1	18.1	14.0

PENNSYLVANIA—Continued

	Prof	Assoc prof	Asst prof	Inst
Northampton County Area CC, III	23.9	20.7	19.9	15.3
O S Johnson Sch of Tech, IV				17.1
Pa C Podiatric Medicine, IIA	36.2	27.5	21.2	—
Pa St U, I	37.8	28.1	22.4	15.3
4-year campuses, IIA	32.7	27.6	21.7	18.1
2-year campuses, III	29.4	25.1	20.2	16.9
Peirce JC, III	21.8	19.8	17.5	14.6
Penn Tech Inst, IV				16.1
Pennco Tech, IV				14.3
Philadelphia C of Art, IIA	26.5	19.8	16.0	
Philadelphia C of the Bible, IIB	16.3	—	12.1	10.7
Philadelphia C of Pharmacy & Science, IIA	33.3	25.4	21.7	16.4
Philadelphia C of Textiles & Science, IIB	31.8	25.4	20.9	—
Pittsburgh Inst of Aeronautics, IV				14.5
Pittsburgh Tech Inst, IV				14.5
Point Park C, IIB	24.0	20.1	15.8	13.4
Reading Area CC, III	21.2	—	15.8	
Robert Morris C, IIB	25.7	23.6	21.2	18.7
Rosemont C, IIB	25.7	22.8	17.2	—
St Francis C*, IIA	23.5	20.4	17.4	14.9
St Joseph's U, IIB	31.8	24.8	19.8	15.0
St Vincent C*, IIB	25.3	21.3	16.4	14.5
Seton Hill C, IIB	23.2	20.4	15.6	13.1
Shippensburg St C, IIA	33.5	27.5	22.5	17.7
Slippery Rock St C, IIA	33.6	27.5	22.0	17.8
Spring Garden C, IIB	26.1	20.2	16.9	—
Susquehanna U, IIB	29.3	23.8	20.3	16.9
Swarthmore C, IIB	37.5	28.6	22.0	18.4
Temple U, I	36.3	27.5	21.8	17.3
Thiel C, IIB	24.6	21.2	17.6	—
U of Pennsylvania, I	42.9	30.6	25.4	—
U of Pittsburgh, I	39.4	28.3	22.1	16.1
Bradford, III	—	24.2	19.7	14.2
Greensburg, III	—	22.0	19.3	14.6
Johnstown, IIB	30.1	24.4	20.7	16.1
Titusville, III		20.3	—	—
U of Scranton, IIA	28.3	23.9	20.3	17.3
Ursinus C, IIB	25.5	20.7	15.1	13.7
Valley Forge Christian C, IIB	—	—	—	10.7
Villa Maria C*, IIB	—	18.1	16.5	—
Villanova U, IIA	34.9	26.8	21.8	16.2
Washington & Jefferson C, IIB	27.1	22.5	19.3	18.3
Waynesburg C, IIB	22.6	19.3	16.9	16.0
West Chester St C, IIA	33.6	27.6	22.3	18.4
Westminster C, IIA	29.2	23.8	20.0	16.9
Westmoreland County CC, III	—	20.7	19.6	16.6
Widener C of Widener U, IIB	33.5	24.7	19.5	16.7
Wilkes C, IIA	27.3	23.3	18.7	15.7
Williamsport Area CC, III	20.6	20.2	19.2	17.2
Wilson C, IIB	24.9	19.1	16.0	—
York C of Pa, IIA	30.9	24.7	20.9	16.7

RHODE ISLAND

	Prof	Assoc prof	Asst prof	Inst
Barrington C, IIB	—	—	14.4	
Brown U, I	38.2	26.9	20.5	—
Bryant C of Business Admin, IIA	33.2	27.7	22.8	21.3
New England Inst of Tech, III			16.5	13.8
Providence C*, IIA	32.5	26.9	21.8	18.3
Rhode Island C, IIA	29.7	23.5	20.4	16.6
CC of Rhode Island, III	26.5	22.8	19.7	13.0
Rhode Island Sch of Design, IIA	25.5	21.4	16.9	—
Roger Williams C, IV				23.8
Salve Regina-Newport C, IIA	23.9	20.1	17.0	13.9
U of Rhode Island, I	32.3	25.5	21.6	15.9

SOUTH CAROLINA

	Prof	Assoc prof	Asst prof	Inst
Aiken Tech C, IV				18.0
Anderson C, IV				16.3
Baptist C at Charleston, IIB	20.7	18.0	15.0	—
Beaufort Tech C, IV				16.5
Benedict C, IIB	21.2	15.4	14.6	11.9
Central Wesleyan C, IIB	15.8	14.1	11.3	
Chesterfield-Marlboro Tech C, IV				17.2
Citadel Military C of SC, IIA	32.0	25.9	21.5	
Claflin C, IIB	17.8	16.5	15.0	13.3
Clemson U, I	37.2	28.0	21.8	16.3
Clinton JC, III				7.4
Coker C, IIB	23.8	18.5	15.1	—
C of Charleston, IIA	28.2	24.4	19.7	16.6
Columbia C, IIB	21.8	19.5	16.8	14.5
Converse C, IIA	25.5	19.5	17.6	16.2
Denmark Tech C, IV				15.4
Erskine C & Sem, IIA	21.8	17.8	15.5	
Florence Darlington Tech C, IV				17.8
Francis Marion C, IIB	32.3	24.5	19.5	14.6
Furman U, IIA	28.3	23.1	18.1	14.4
Greenville Tech C, IV				18.7
Horry-Georgetown Tech C, IV				17.3
Lander C, IIB	29.1	23.7	19.5	15.4
Limestone C, IIB	20.7	18.1	16.0	
Lutheran Theol Southern Sem, I	20.9	—		
Midlands Tech C, IV				19.6
Morris C, IIB		14.9	13.3	12.2
Newberry C, IIB	20.5	17.3	16.4	14.9
N Greenville C, III		—	12.7	11.3
Orangeburg Calhoun Tech C, IV				16.6
Piedmont Tech C, III				17.2
Presbyterian C, IIB	25.7	20.5	17.0	—
Spartanburg Methodist C, IV				17.3

Continued on Following Page

FACT-FILE—Continued

SOUTH CAROLINA—Continued

	Prof	Assoc prof	Asst prof	Inst
Spartanburg Tech C, IV				17.3
Sumter Area Tech C, IV				17.9
Tri-County Tech C, IV				18.2
Trident Tech C, IV				17.9
U of South Carolina				
Aiken, IIB	28.7	22.2	18.2	—
Beaufort, III		—	17.3	—
Coastal Carolina, IIB	26.3	22.7	19.7	16.5
Columbia, I	36.6	27.4	21.7	17.1
Lancaster, III		21.5	18.4	—
Salkehatchie, III	—	—	17.0	—
Spartanburg, IIB	—	22.2	20.0	18.0
Sumter, III		—	18.4	16.8
Voorhees C, IIB	20.9	16.8	14.0	12.3
Winthrop C, IIA	32.0	26.4	21.4	15.0
Wofford C, IIB	28.5	22.2	17.8	—
York Tech C, IV				18.3

SOUTH DAKOTA

	Prof	Assoc prof	Asst prof	Inst
Augustana C, IIA	25.5	21.3	18.4	14.4
Black Hills St C, IIA	24.0	20.2	18.1	14.5
Dakota St C, IIB	22.8	19.7	17.6	15.6
Dakota Wesleyan U, IIB	22.1	20.1	16.2	—
Freeman JC, III		—		11.3
Huron C, IIB	—	15.6	13.5	—
Mt Marty C, IIB		—	15.8	13.7
National C, IV				14.4
Northern St C, IIA	24.8	21.6	18.6	16.8
Oglala Sioux CC, IV				16.1
Presentation C, IV				14.3
Sioux Falls C, IIB	20.3	18.4	17.7	—
S D Sch of Mines & Tech, IIA	28.6	22.9	20.1	16.2
South Dakota St U, IIA	26.0	21.5	18.4	16.2
U of South Dakota, I	28.2	22.8	18.4	14.7
Springfield, IIB	23.4	21.3	19.4	17.0
Yankton C, IIB	—	16.0	14.1	14.1

TENNESSEE

	Prof	Assoc prof	Asst prof	Inst
Austin Peay St U, IIA	25.8	20.9	17.3	14.2
Belmont C, IIB	23.4	20.0	17.0	15.5
Bethel C, IIB	18.5	16.2	—	13.3
Bryan C, IIB	21.6	—	16.4	
Carson-Newman C, IIB	22.6	19.2	16.5	—
Chattanooga St Tech CC, III	-	21.4	19.6	17.4
Christian Brothers C, IIB	27.4	21.3	15.9	17.0
Cleveland St CC, III	22.8	19.2	16.1	13.9
Columbia St CC, III	—	20.7	19.3	14.9
Cumberland C, IV				12.8
David Lipscomb C, IIB	22.0	18.6	16.5	14.0
Dyersburg St CC, III		—	17.3	14.4
E Tenn St U, IIA	28.4	23.3	19.2	15.7
Free Will Baptist Bible C, IV				16.9
Freed-Hardeman C, IV				17.6
Hiwassee C, IV				14.5
Jackson St CC, III		19.3	17.1	15.2
King C, IIB	22.5		16.0	
Lambuth C, IIB	20.8	18.6	15.2	
Lane C, IIB	15.4	14.7	13.5	11.7
Le Moyne-Owen C, IIB	—	16.7	16.2	13.8
Lincoln Memorial U, IIB	—	—	14.2	11.7
Martin C, III	19.9		—	
Maryville C, IIB	19.4	15.8	13.8	12.5
Memphis St U, I	29.6	23.6	19.0	14.7
Middle Tenn St U, I	27.3	22.9	19.0	15.5
Motlow St CC, III	20.2	19.7	—	15.8
Nashville St Tech Inst, III	22.0	19.3	18.2	13.9
Roane St CC, III		20.9	17.9	15.6
Shelby St CC, III	21.7	18.9	15.5	13.6
Southern C of Optometry, IIA		—	31.3	25.6
Southern Missionary C, IIB	17.6	16.7	15.6	13.9
Southwestern at Memphis, IIB	27.6	23.2	17.7	
St Tech Inst at Memphis, III	21.8	18.7	16.9	14.1
Steed C, IIB				10.0
Tennessee St U, IIA	29.4	23.4	19.1	15.9
Tenn Tech U, IIA	28.3	22.6	19.2	15.2
Tenn Temple U, IV				10.9
Tenn Wesleyan C, IIB	—	—	—	11.9
Tomlinson C, IV				14.7
Trevecca Nazarene C, IIB	19.8	17.2	15.3	
Union U, IIB	23.3	18.9	17.4	14.8
U of the South, IIB	27.7	22.1	18.3	16.4
U of Tennessee				
Chattanooga, IIA	27.4	22.7	18.0	—
Institute of Ag, IIA	29.3	25.1	22.1	—
Knoxville, I	30.6	23.7	19.6	14.8
Martin, IIA	24.3	21.1	17.9	—
Vanderbilt U, I	36.6	25.9	20.3	18.0
Volunteer St CC, III	23.1	20.1	18.3	15.8
Walters St CC, III	—	19.3	17.3	15.5

TEXAS

	Prof	Assoc prof	Asst prof	Inst
Abilene Christian U, IIA	26.8	22.4	18.9	15.2
Alvin CC, IV				23.9
Amarillo C, III	25.1	23.3	20.8	19.8
Angelina C, IV				19.8
Angelo St U, IIA	30.5	26.7	23.8	16.8
Austin C, IIA	26.0	20.8	16.5	
Austin CC, IV				21.3
Baylor U, I	34.5	25.9	21.5	19.6
Bee County C, IV				19.0
Bishop C, IIB	19.8	18.1	17.1	14.8
Blinn C, IV				22.7
Brazosport C, IV				21.6
Brookhaven C, IV				24.4
Central Texas C, IV				23.5
Cisco JC, IV				17.4
Clarendon C, IV				18.5
College of the Mainland, IV				23.1
Concordia Lutheran C, III	—	—	14.9	
Cooke County C, IV				19.9

TEXAS—Continued

	Prof	Assoc prof	Asst prof	Inst
Corpus Christi St U, IIA	31.1	24.5	20.2	—
Dallas Baptist C, IIB	24.9	21.4	17.7	
Del Mar C, III	31.1	26.0	22.9	19.7
East Texas St U, I	31.0	24.9	21.0	18.2
Eastfield C, IV				26.7
El Centro C, IV				23.4
El Paso County CC, IV				19.6
Episcopal Theol Sem of the SW, IIA	32.4			
Frank Phillips C, IV				23.7
Galveston C, IV				21.2
Grayson County JC, IV				21.1
Gulf Coast Bible C, IIB	19.3			—
Hardin-Simmons U, IIA	22.8	19.4	16.9	14.0
Henderson County JC, IV				19.5
Hill JC, IV				16.9
Houston Baptist U, IIB	24.9	22.8	20.2	18.0
Houston CC, IV				19.7
Howard County JC, IV				21.2
Howard Payne U, IIB	18.2	17.0	15.9	13.6
Huston-Tillotson C, IIB	21.4	17.4	15.6	—
Incarnate Word C, IIA	24.7	20.2	16.8	14.0
Jacksonville C, IV				14.0
Jarvis Christian C, IIB	21.6	18.0	—	13.9
Kilgore C, IV				21.9
Lamar U, IIA	31.0	25.7	21.4	16.7
Laredo St U, IIA	28.7	25.2	22.0	
Lee C, IV				26.2
Le Tourneau C, IIB	—	17.6	15.9	14.5
Lon Morris C, IV				16.9
Lubbock Christian C, IIB	20.0	18.1	14.7	—
McLennan CC, IV				21.0
McMurry C, IIB	21.7	19.2	16.1	
Midland C, III				21.8
Midwestern St U, IIA	31.5	21.4	21.2	14.9
Mountain View C, IV				26.4
Navarro C, IV				20.3
N Harris County C, IV				22.2
N Texas St U, I	32.7	26.7	22.5	18.9
Odessa C, III	30.9	24.8	22.9	20.3
Our Lady of the Lake U, IIA	23.3	19.8	17.4	12.7
Pan American U, IIA	32.0	25.4	20.8	17.6
Panola JC, IV				16.8
Paris JC, IV				18.4
Paul Quinn C, IIB	—		—	11.2
Prairie View A&M U, IIA	—	24.9	21.8	19.4
Ranger JC, IV				16.7
Rice U, I	38.4	28.0	22.6	19.4
Richland C, IV				25.9
St Edward's U, IIB	25.4	20.3	16.6	13.8
St Mary's U, IIA	30.2	20.9	17.7	—
St Philip's C, III	27.8	24.4	21.0	17.6
Sam Houston St U, IIA	30.8	26.2	22.5	—
San Antonio C, III	27.7	24.6	21.6	15.8
San Jacinto C Central Campus, IV				24.7
S Plains C, III	23.5	23.1	20.6	18.1
S Texas C of Law, IIA	39.8	—		
S Methodist U, I	36.6	26.7	21.5	15.3
SW Texas JC, IV				21.0
SW Texas St U, IIA	31.5	27.3	21.3	16.8
SW Assemblies of God C, III			16.0	13.5
SW Christian C, III			—	12.1
Southwestern U, IIB	25.8	21.3	17.6	—
Stephen Austin St U, IIA	30.6	25.3	21.3	17.0
Sul Ross St U, IIA	28.9	25.1	19.7	16.0
Tarleton St U, IIA	27.8	23.5	20.9	16.6
Temple JC, IV				19.6
Texarkana CC, III	22.0	21.8	17.1	15.9
Texas A&I U, IIA	29.6	23.8	20.4	17.0
Texas A&M U, I	40.2	31.5	25.3	19.5
Galveston, IIB		21.6	21.6	
Texas Christian U, I	30.9	23.1	19.7	16.6
Texas C, IIB	—	16.2	13.1	10.9
Texas C of Osteopathic Medicine, IIA	46.1	34.8	32.8	—
Texas Lutheran C, IIB	23.3	20.3	18.1	—
Texas Southern U, I	29.5	25.2	20.2	16.2
Texas Southmost C, IV				20.8
Texas St Tech Inst				
Amarillo, III	20.2	19.8	16.9	
Harlingen, IV				17.9
Waco, III	23.5	20.3	17.0	
Texas Tech U, I	34.2	26.8	21.4	15.7
Texas Wesleyan C, IIB	22.4	21.0	19.8	
Texas Woman's U, I	33.2	26.9	21.7	18.5
Trinity U, IIA	33.2	26.8	21.4	20.0
Tyler JC, IV				18.6
U of Dallas, I	27.2	24.1	19.7	—
U of Houston, I	37.9	27.9	23.2	20.1
Clear Lake City, IIA	32.6	26.7	22.5	21.7
Downtown C, IIB		22.1	18.6	14.9
Victoria, IIA	—	26.4	—	
U of Mary Hardin-Baylor, IIB	20.0	17.6	14.7	—
U of St Thomas*, IIA	21.5	18.4	17.5	15.5
U of Texas				
Arlington, IIA	34.2	26.1	20.7	15.7
Austin, I	38.7	27.6	22.9	16.9
Dallas, I	37.5	27.2	21.6	16.7
El Paso, IIA	32.4	27.1	21.8	18.1
Permian Basin, IIA	30.0	24.1	20.0	
San Antonio, IIA	33.2	26.8	20.5	19.7
Tyler, IIA	28.5	22.5	19.4	—
Vernon Regional JC, IV				18.4
Victoria C, IV				23.2
Weatherford C, IV				18.7
W Texas C, III	26.3	22.5	19.2	17.5
W Texas St U, IIA	30.0	25.0	20.7	17.0
Wharton County JC, IV				23.2
Wiley C, IIB	17.6	14.6	—	12.2

UTAH

	Prof	Assoc prof	Asst prof	Inst
C of Eastern Utah, IV				20.0
Dixie C, III	26.1	23.7	21.1	15.4
Snow C, III	23.9	23.0	19.1	16.3
S Utah St C, IIB	27.4	21.5	19.1	—
Stevens Henager C, IV				8.4
U of Utah, I	35.1	25.5	20.9	17.8
Utah St U, I	31.2	24.4	19.7	15.9
Utah Tech C				
Provo, IV				20.6
Salt Lake, IV				20.6
Weber St C, IIA	28.5	23.8	20.4	15.9
Westminster C, IIB	17.6	13.5	12.8	—

VERMONT

	Prof	Assoc prof	Asst prof	Inst
Bennington C, IV				18.4
Green Mountain C, IIB	19.9	19.1	16.2	—
Middlebury C, IIB	33.7	26.2	20.5	18.8
St Michael's C*, IIA	25.6	20.2	17.0	14.3
Trinity C, IIB	—	17.7	15.4	—
U of Vermont & St Ag C, I	31.9	24.6	20.0	16.3

VIRGINIA

	Prof	Assoc prof	Asst prof	Inst
Blue Ridge CC, III	—	23.3	19.8	16.0
Bridgewater C, IIB	22.9	19.1	16.8	—
Central Va CC, III	—	23.0	19.4	17.7
C of William & Mary, I	31.3	25.5	19.8	15.5
Richard Bland C, III	—	22.5	17.9	—
Christopher Newport C, IIB	26.6	21.9	20.2	18.0
Dabney Lancaster CC, III	—	22.3	19.2	15.3
E Shore CC, III	—	21.7	—	—
George Mason U, IIA	31.8	25.2	21.2	18.9
Germanna CC, III	—	21.6	19.3	—
Hollins C, IIB	30.5	24.3	18.5	—
James Madison U, IIA	28.6	23.7	20.1	16.7
J Sargeant Reynolds CC, III	24.9	21.4	19.0	16.2
John Tyler CC, III	23.3	22.4	18.0	15.0
Liberty Baptist C, IIB	22.6	20.4	18.3	15.9
Lord Fairfax CC, III	—	21.2	18.1	—
Mary Baldwin C, IIB	23.2	19.9	16.8	15.2
Mountain Empire CC, III	—	20.4	18.8	16.2
New River CC, III	24.8	22.5	19.0	15.5
Norfolk St U, IIA	27.9	23.2	19.1	15.7
N Virginia CC, III	26.3	23.2	19.7	16.5
Old Dominion U, IIA	33.0	25.4	20.9	15.9
Patrick Henry CC, III	—	21.5	18.5	14.6
Paul D Camp CC, III	—	22.0	18.6	15.9
Piedmont Va CC, III	—	20.7	18.7	21.9
Randolph-Macon C, IIB	25.7	21.4	17.4	—
Randolph-Macon Woman's C, IIB	26.4	21.1	17.8	—
Rappahannock CC, III	—	21.9	18.3	15.3
Shenandoah C & Conservatory of Music, IIB	—	16.8	15.5	11.7
Southside Va CC, III	—	20.7	18.3	15.7
SW Virginia CC, III	—	21.6	19.7	16.5
Sweet Briar C, IIB	27.6	21.6	17.7	—
Thomas Nelson CC, III	25.0	22.0	18.7	15.7
Tidewater CC, III	25.2	21.5	18.5	16.3
U of Richmond, IIA	33.4	25.8	18.9	14.4
U of Virginia, I	41.3	28.8	21.1	15.6
Clinch Valley C, IIB	23.8	18.7	16.3	
Virginia Commonwealth U, I	32.3	26.6	22.2	17.1
Va Highlands CC, III	—	22.2	19.1	15.7
Va Military Inst, IIB	27.1	22.5	20.4	15.9
Virginia Poly Inst & St U, I	38.7	28.6	22.6	16.9
Virginia St U, IIA	26.6	23.0	19.3	16.8
Va Wesleyan C, IIB	24.8	21.8	18.5	—
Va Western CC, III	25.5	22.5	19.4	16.2
Washington & Lee U, IIB	31.7	23.4	20.1	—
Wytheville CC, III	24.5	22.2	18.4	14.9

WASHINGTON

	Prof	Assoc prof	Asst prof	Inst
Bellevue CC, IV				25.0
Big Bend CC, IV				24.4
Central Washington U, IIA	30.3	25.0	21.8	—
Centralia C, IV				23.9
Clark C, IV				23.3
Columbia Basin CC, IV				23.2
Cornish Inst, IV				11.5
E Washington U, IIA	29.1	25.2	21.3	—
Edmonds CC, IV				23.9
Everett CC, IV				24.6
Evergreen St C, IV				26.4
Ft Steilacoom CC, IV				22.3
Gonzaga U, IIA	31.2	23.8	19.4	15.8
Grays Harbor C, IV				25.2
Green River CC, IV				26.3
Highline CC, IV				24.0
Lower Columbia C, IV				22.3
Lutheran Bible Inst of Seattle, IIB				22.0
N Seattle CC, IV				24.6
NW C of Assemblies of God, IIB		16.3	—	
Olympia Tech CC, IV				22.9
Olympic C, IV				25.0
Pacific Lutheran U, IIA	28.6	22.9	19.0	17.1
Peninsula C, IV				24.9
St Martin's C, IIB		19.1	15.7	
Seattle CC, IV				25.0
South Campus, IV				23.9
Seattle Pacific U, IIA	27.7	23.0	20.2	16.7
Seattle U*, IIA	27.5	23.1	19.3	17.7
Shoreline CC, III	24.1			19.6
Skagit Valley C, IV				23.5
Tacoma CC, IV				27.5
U of Puget Sound, IIA	28.1	23.3	19.2	
U of Washington, I	37.8	26.7	22.2	19.5
Walla Walla CC, IV				20.3
Washington St U, I	33.0	25.4	21.7	16.4
Wenatchee Valley C, IV				22.8
W Washington U, IIA	30.1	25.1	20.4	
Whatcom CC, IV				22.0
Whitman C, IIB	31.8	24.8	19.5	—
Whitworth C, IIA	26.2	21.8	17.9	—

WASHINGTON—Continued

	Prof	Assoc prof	Asst prof	Inst
Yakima Valley CC, IV				24.4

WEST VIRGINIA

	Prof	Assoc prof	Asst prof	Inst
Alderson-Broaddus C, IIB	—	18.2	15.7	13.8
Beckley C, IV	16.4			
Bethany C, IIB	25.5	21.1	17.1	—
Bluefield St C, IIB	23.4	20.8	18.5	15.2
Concord C, IIB	25.7	21.1	17.9	—
Davis & Elkins C, IIB	19.8	17.3	15.2	13.2
Fairmont St C, IIB	25.9	20.3	18.7	16.8
Glenville St C, IIB	24.2	21.5	18.9	16.0
Marshall U, IIA	27.4	23.2	19.6	15.0
Ohio Valley C, III		—	14.3	—
Parkersburg CC, III	23.1	20.2	17.8	15.9
Potomac St C, III	23.7	19.8	17.6	—
Salem C, IIB	—	18.2	15.2	13.2
Shepherd C, IIB	27.3	23.0	20.2	—
Southern West Virginia CC, III	—	—	18.7	15.3
W Liberty St C, IIB	25.8	21.7	18.7	16.8
W Va C of Graduate Studies, IIA	31.1	25.7	20.2	—
West Virginia Inst of Tech, IIB	27.2	22.7	20.1	16.8
West Virginia N CC, III	—	18.7	16.9	14.4
W Va Sch of Osteopathic Medicine, IIA	—	41.8	21.4	
West Virginia St C, IIB	25.9	22.0	18.7	15.9
West Virginia U, I	32.2	25.5	20.8	15.9
W Va Wesleyan C, IIB	22.0	19.0	17.0	14.3
Wheeling C, IIB	23.7	19.1	16.4	14.8

WISCONSIN

	Prof	Assoc prof	Asst prof	Inst
Alverno C, IIB	—	20.2	16.5	14.8
Beloit C, IIB	24.8	20.1	17.5	
Cardinal Stritch C*, IIA	—	17.9	15.1	—
Carroll C, IIB	27.5	22.5	20.5	
Carthage C, IIB	25.6	19.8	17.7	14.2
Concordia C, III	—	15.1	13.4	—
District One Tech Inst, IV				23.8
Edgewood C, IIB		18.0	—	
Gateway Tech Inst, IV				26.0
Inst of Paper Chemistry, IIA	36.6	32.4	25.6	—
Lakeland C, IIB	—	—	16.0	13.6
Lawrence U, IIB	31.6	26.0	19.9	
Madison Area Tech C, IV				26.0
Madison Business C, IV				11.4
Marian C, IIB		20.5	16.2	13.6
Marquette U, I	35.8	27.8	22.2	17.0
Milton C, IIB		—	14.8	
Milwaukee Sch of Engineering, IIA	25.5	21.7	19.7	—
Moraine Park Tech Inst, IV				20.1
Mt Mary C, IIB	—	20.7	15.8	—
Mt Senario C, IIB	—	—	14.4	—
Nashotah House, IIA	18.4			
Nicolet C & Tech Inst, IV				22.5
NE Wisconsin Tech Inst, IV				22.2
Northland C, IIB	20.5	17.0	—	13.8
Northwestern C, IIB	11.9			
Ripon C, IIB	30.0	22.8	18.2	—
St Norbert C*, IIB	28.1	23.3	17.3	—
U of Wisconsin				
Eau Claire, IIA	31.2	24.6	21.5	18.1
Green Bay, IIA	32.4	24.7	18.5	
La Crosse, IIA	30.6	25.4	23.7	22.0
Madison, I	35.3	25.5	21.9	19.4
Milwaukee, I	35.7	25.9	21.5	18.8
Oshkosh, IIA	30.8	25.8	22.3	19.2
Parkside, IIA	33.4	25.4	19.8	
Platteville, IIA	29.2	25.2	21.9	
River Falls, IIA	29.8	23.7	20.0	17.9
Stevens Point, IIA	29.1	23.8	20.8	18.1
Stout, IIA	29.6	24.0	20.6	18.4
Superior, IIA	31.7	25.0	19.5	—
Whitewater, IIA	30.5	25.1	22.1	19.6
Center System, III	27.1	23.0	19.5	15.8
Viterbo C, IIB	—	20.5	17.3	15.2
Waukesha County Tech Inst, IV				25.4
W Wisconsin Tech Inst, IV				22.0

WYOMING

	Prof	Assoc prof	Asst prof	Inst
Casper C, IV				24.1
Central Wyoming C, IV				22.3
E Wyoming C, IV				21.0
Laramie County CC, IV				23.6
Northwest CC, III	—	—	22.7	19.2
Sheridan C, IV				22.6
U of Wyoming, I	37.6	26.7	22.9	19.7
W Wyoming CC, III	—	30.0	26.3	22.1

PUERTO RICO

	Prof	Assoc prof	Asst prof	Inst
American C of Puerto Rico, IIB			9.1	8.3
Bayamon Central U, IIB			—	10.7
Caribbean U C, IV				11.3
Catholic U of Puerto Rico, IIA	17.3	13.8	11.5	9.6
Conservatory of Music of Puerto Rico, IIB		9.2		
Puerto Rico JC, III		14.2		10.4
San Juan Tech CC, IV				9.1
U of Puerto Rico				
Cayey U C, IIB	—	20.3	16.6	12.3
Humacao U C, IIB	25.3	19.6	15.8	13.4
Mayaguez, IIA	28.9	22.0	18.6	15.9
Rio Piedras, I	25.5	19.8	16.4	13.4

OTHER OUTLYING AREAS

	Prof	Assoc prof	Asst prof	Inst
American Samoa CC, IV				14.5
U of Guam, IIA	29.6	24.4	21.5	18.9
CC of Micronesia, IV				9.2
C of Virgin Islands, IIA	28.2	24.3	21.0	17.6

New Jersey Rules on Faculty Layoffs Are Held Valid

TRENTON, N.J.

The New Jersey Supreme Court has ruled that the policies and procedures approved last year by the state's board of higher education for laying off state-college employees in times of financial crisis are valid, even though they were adopted without consulting the faculty union that represents the employees.

The justices decided that the board, which is both a statewide regulatory agency with jurisdiction over higher education and an employer of state-college personnel, had the authority to establish regulations governing "terms and conditions of employment" without engaging in collective negotiations because its "employer role is basically secondary to its regulatory authority."

The justices affirmed a lower court's decision when they said that under New Jersey law the criteria for determining the existence of a fiscal emergency, for establishing the need for layoffs, and for rehiring employees who have been laid off were "clearly non-negotiable matters of management prerogative."

However, they modified the earlier decision by the appellate division of the superior court when they ruled that the procedures used to make personnel decisions could become matters for negotiation when they were not clearly spelled out in the regulations.

The Council of New Jersey State College Locals, the affiliate of the American Federation of Teachers (A.F.L.-C.I.O.) that represents faculty members in the four-year colleges, challenged the board's regulations for laying off personnel shortly after they were adopted in January, 1981.

Union Not Consulted

In general, the regulations allow trustees of any of the eight state colleges to declare "a state of fiscal exigency" at any time and lay off any employee, including tenured faculty members. The rules say only that college administrators should try to lay off faculty members on the basis of seniority, not that they must do so. The regulations also say that employees who have been dismissed must be considered for other available jobs and, if rehired, must be given ranks and salaries equivalent to those they had when they were laid off.

The board of higher education developed and adopted the layoff procedures without consulting the council, which represents about 3,200 faculty members in the state system.

In its lawsuit, the union argued, among other things, that if the board had the authority to establish regulations affecting the working conditions of its employees without negotiations, it could abuse its power and deprive state-college employees of some of their rights.

The suit also charged that the regulations, which suspend provisions for tenure and seniority for the duration of an emergency, violated New Jersey's tenure statutes.

Although the justices questioned the "soundness" of allowing an agency to pass regulations that affect the working conditions of its employees, they said the "mere potential" for abuse was not sufficient grounds to deny the authority. They said that "the statutory protections of tenure are inapplicable in cases of fiscal emergency."—BEVERLY T. WATKINS

Cost of Going to College Rises 11 Pct. in 12 Months, College Board Finds

NEW YORK

The total cost of attending college in 1982-83 will average 11 per cent higher than last year, the College Board estimates.

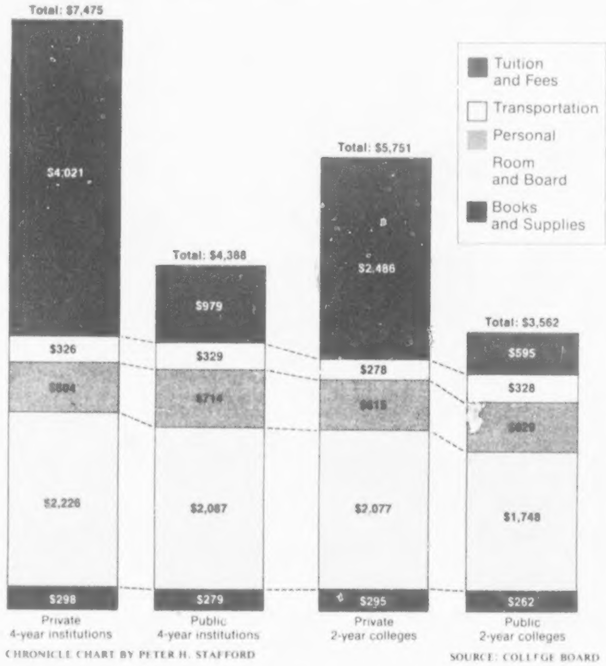
Tuition and fees, board and room, books and supplies, transportation, and personal expenses for a resident student attending a four-year public college in 1982-83 will add up to an average $4,388, the board reports. That's a one-year increase of 13 per cent.

At private four-year institutions, the average total cost for a resident student will be $7,475, an increase of 11.1 per cent.

Costs for resident students will be up an average of 9.1 per cent, to $3,562, at public two-year colleges and 10.4 per cent, to $5,751, at private two-year colleges.

The estimated total cost for commuting students will also increase substantially. Even so, it will be $800 to $1,000 lower, on the average, than for resident students, the College Board reports.

For commuting students, the one-year increase in average total cost is estimated at 12.5 per cent at public four-year institutions, 12.6 per cent at private four-year institutions, 10.9 per cent at public two-year colleges, and 14.3 per cent at private two-year colleges.



CHRONICLE CHART BY PETER H. STAFFORD

SOURCE: COLLEGE BOARD

The averages were estimated on the basis of reports from more than 3,300 institutions. A list of the figures for the individual institutions is included in *The College Cost Book, 1982-83*, published this month and available for $9.95 from College Board Publications, Department E45, Box 886, New York 10101.

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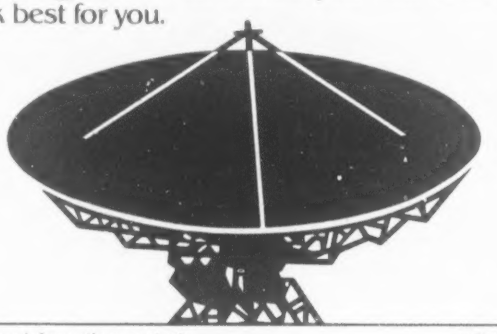

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Private Colleges

Continued from Page 1

over $36,000, the increase was 156 per cent.

The survey data were based on a national sample of 122 private colleges and universities with enrollment over 500.

During the two years, average student expenses—including tuition, room, and board—at private colleges and universities rose from $5,800 to $7,211, according to the survey.

To cover the increase, students have turned from federal grants to aid from their institutions, and are much more dependent on borrowing and their own earnings.

On the average, federal aid to students in the form of Pell Grants declined from $668 in 1979-80 to $494 in 1981-82, according to the survey. The average supplemental grant stayed about the same: $208 the first year and $207 two years later. The average state grant declined from $610 to $574.

Scholarship grants from the colleges' own funds increased from $564 to $777, the survey found.

The average amount of student loans more than doubled—from $703 in 1979-80 to $1,543 in 1981-82—and the amount from student earnings and savings rose from $1,099 to $1,437.

The survey report said that trends in student aid "clearly show an increased reliance on self-help."

When the 1980 amendments to the Higher Education Act were passed, it said, the national goal was for students to be responsible for paying 25 per cent of the cost of their education with money from savings, work, and loans.

In 1980, the average share of the cost of education paid by a student at a private college was 31.1 per cent, according to the report, but in 1982 that share had risen to 41.4 per cent.

Leadership Seminars
American Council on Education

THE FACULTY HANDBOOK REVISION: CONTENT AND PROCESS

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For materials and further information, write or call: American Council on Education, Attention: Leadership Seminars CH, One Dupont Circle, Washington, D.C. 20036; (202) 833-4842.

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HIGH TECHNOLOGY AND HIGHER EDUCATION

Conference Announcement
Academic Affairs Administrators - Southeast Region

OCTOBER 7-9, 1982

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Featured Speakers

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Mr. Earle Williams, President, BDM International, Inc., member, Virginia State Board for Community Colleges; and Chairman, Institute for Science and Technology.

Dr. Wade Gilley, Senior Vice President and Professor of Higher Education, George Mason University; former Secretary of Education for Virginia; and former President and Professor of Engineering, Bluefield State College.

Dr. Dale Parnell, President, American Association of Community and Junior Colleges; former Chancellor, San Diego Community College System.

Call for Papers

Refereed papers will be published as proceedings of the conference. Theme of papers to reflect higher education's response to high technology, bridging the gap between the high technology industry and higher education, or the impact of high technology on the curriculum and instruction. Send 50-100 word abstracts to Dr. Judy Pelham, George Mason University, Fairfax, Virginia 22030, by September 15, 1982.

Registration Information

For further information and registration packet, write or call Dr. Nancy Joyner, George Mason University, Fairfax, Virginia, 22030 (703) 323-2198.

Side-lines

The first football game to be televised under the National Collegiate Athletic Association's new $263-million contracts with ABC and CBS will feature a university that is suing the N.C.A.A. over its exclusionary television policies.

The University of Georgia, which has charged the N.C.A.A. with violating the antitrust laws by restraining the rights of individual institutions to make their own TV deals, will take on the 1981 national champion, Clemson University, next Monday evening, Labor Day.

To get the first slot, Georgia agreed to move the date of its game with Clemson (which it may now regret, since its star tailback, Herschel Walker, is injured). And since the game is to be played at night, Georgia also agreed to spend nearly $1-million to install lights at its stadium, according to Fred Davison, the university's president.

Teams will get about $600,000 for appearances on national TV under the new contract, but Georgia and Clemson must share their earnings with other members of their conferences.

•

"I'm scared stiff we might win," said Bill Flynn, athletic director at Boston College, of his institution's opening football game this Saturday.

Boston will play Texas A&M in the Aggies' first game under Coach Jackie Sherrill, whose $287,000-a-year contract shook the sports world and academe earlier this year.

"If we win," said Flynn, "my coach, Jack Bicknell, might want to be paid as much as Sherrill."

•

The "Bear Bryant Retirement Law" is unconstitutional, an Alabama judge has ruled. The Alabama legislature, fearful that the famous football coach, now 68, would have to retire in two years under state law, passed a bill that would allow the University of Alabama's trustees to waive—in Bryant's case only—the requirement that university employees retire at 70. Such a waiver, said the judge, would be "arbitrary and capricious in every sense." The coach said he didn't want the exception. "I want to be treated like any other citizen," he said.

•

A trip to the Rose Bowl loses some of its exclusivity this year.

The University of California at Los Angeles, miffed because the Los Angeles Coliseum made special concessions to a professional football team, has moved all of its home football games to the site of the famous New Year's Day game in Pasadena. In the past, the Rose Bowl has not been used for regular-season college football games, but has been restricted to such things as championships, all-star games, and in recent years, a Sunday flea market.

•

A new version of an old joke is making the rounds. Q: How many college football players does it take to change a light bulb? A: Only one, but he gets three credits for it.

Athletics

Colleges Urged to Teach Athletes, Coaches the Dangers of Drug Abuse and 'Doping'

'Drug Doping'

By KIM McDONALD

In college locker rooms across the country, otherwise healthy athletes take massive quantities of vitamins, receive hormone injections, and dose themselves with amphetamines and steroids—all in the hope of improving their athletic performance.

Although sports physicians say such "drug doping" is not as hazardous as the use of street drugs and alcohol that plagues some college teams, the use of a few of the substances is creating thorny health problems, particularly when it is condoned or encouraged by coaches and trainers.

Anabolic steroids, for example—a type of drug some athletes claim increases strength and bulk—have become increasingly popular among wrestlers, weight lifters, shot-putters, and football players, despite medical evidence that they have no effect on performance and indeed may be harmful.

Warning Issued

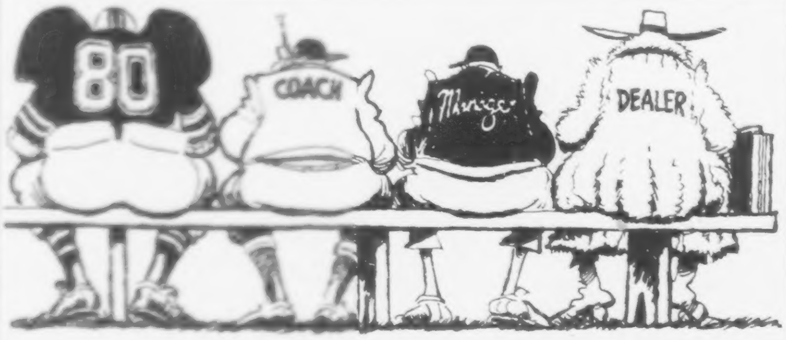
Five years ago, the American College of Sports Medicine issued a warning that steroids not only do not improve athletic performance, but can cause liver disorders and a decrease in sperm production and testicle size.

Yet, says David Pearson, a graduate student at Ball State University, "the use of steroids in athletic competition is certainly not decreasing, it's on the rise." Mr. Pearson surveyed 35 nationally ranked collegiate weight lifters, shot-putters, and javelin throwers last year and found that 85 per cent used steroids.

"More and more of them are talking about what they're taking," he says. "And physicians say more and more athletes are coming to them and asking for steroids."

Although athletes are typically society's models of health, the fact that they sometimes use and abuse drugs and other substances is not new. Athletes in Ancient

Continued on Following Page



BY MARLETTE FOR THE CHARLOTTE OBSERVER
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Drug Abuse

By N. SCOTT VANCE

The National Collegiate Athletic Association has urged colleges to improve drug-education programs for athletes and coaches after a survey found that athletes wanted to know more about drugs and that many coaches needed to know more about them.

The survey also indicated that about as many college athletes used drugs, including alcohol and marijuana, as did non-athletes on campuses, according to members of the N.C.A.A.'s drug-education committee, which conducted the survey and made the recommendations.

Fifty-nine per cent of the athletes surveyed rated as either "fair" or "poor" their school's effort to help them understand and prevent drug abuse. Many others, in written comments, asked for more information on drugs.

The committee surveyed 1,309 athletes, coaches, trainers, and team physicians at institutions belonging to the Big 10 conference. The survey, made in September, 1981, was limited to male athletes and coaches involved in football, swimming, track, and basketball.

Sixty-two per cent of the athletes said they drank alcohol, 20 per cent said they smoked marijuana, 16 per cent said they chewed tobacco, and 7 per cent said they used cocaine. The survey did not ask athletes to what degree they used the substances, although those who had "experimented once or twice" were not classified as "users."

Among the most surprising findings, committee members said, was that many coaches and trainers said amphetamines and anabolic steroids were "helpful" to their athletes.

"That shocked the hell out of me," said Robert Murphy, a committee member and team physician and associate professor of preventive medicine at Ohio State University. Although "there is some honest disagreement" about whether steroids enhance athletic performance, he said, "the question must be, At what price?"

Many Think Steroids 'Helpful'

Long-term effects of steroids are largely unknown and "could be quite serious," Dr. Murphy warned.

Thirty-five per cent of the 167 coaches, trainers, and physicians surveyed said steroids were "helpful" to athletic performance, and 8 per cent said amphetamines, or "uppers," were helpful. Seven of 15 swimming coaches, 8 of 18 track coaches, 8 of 21 basketball coaches, and 13 of 55 football coaches called steriods

Continued on Page 28, Column 1

Court Rejects Challenge to NCAA's Sway over TV

AUSTIN, TEXAS

A judge here has sustained the authority of the National Collegiate Athletic Association to control the television broadcasts of its member institutions' football teams.

The ruling was a defeat for the University of Texas at Austin, which had sued the N.C.A.A. for allegedly violating the institution's property rights. Judge Herman Jones, of the Travis County, Tex., district court, granted an N.C.A.A. request to have the case thrown out of court before a scheduled August 30 trial.

The judge "threw them right out on their ear," said Robert M. Roller, a lawyer for the N.C.A.A.

Judge Jones ruled that by joining the N.C.A.A., the university had agreed to allow the association to control television broadcasts of the Texas football team.

The university had asked the court to affirm its right to negotiate its own television contracts. The judge issued no written opinion in the case.

"We're extremely disappointed that the merits of the case weren't heard," said Ronald Brown, the University of Texas vice-president for student affairs. "We would feel infinitely better if there had been a full hearing, even if we would have lost."

Mr. Brown said the university had not decided whether to appeal the ruling.

The Texas lawsuit was but one facet of a conflict over whether individual institutions or the N.C.A.A. will control the televising of college football.

▶ The Universities of Georgia and Oklahoma are also in court attempting to wrest control away from the N.C.A.A. A decision in that case is expected this week.

▶ The Justice Department's antitrust division is investigating the N.C.A.A.'s television-contract arrangements.

At the N.C.A.A.'s national convention last January, the University of Texas got an order from Judge Jones stopping the delegates from voting on whether individual institutions should be allowed to negotiate their own television contracts, but N.C.A.A. lawyers persuaded another judge in the same court to lift the order.

The N.C.A.A. member institutions then voted overwhelmingly to allow the association to control the televising—and the television revenues—of their football teams.

—N. SCOTT VANCE

Drugs

Continued from Preceding Page

Greece consumed mushrooms and sesame seeds in the hope of improving their performance. In 1886, a drug overdose reportedly caused the first death in a bicycle race. In 1960, two Danish bicyclists died in the Rome Olympics as a result of overdoses of amphetamines.

While few statistics or surveys are available to prove it, many sports physicians believe, based on their own observations and on conversations with athletes, that drug use among athletes is growing.

"Just by looking at the weight-training and running magazines, you can see there are so many more people advertising products to increase your athletic performance," says David R. Lamb, director of Purdue University's exercise-physiology laboratory. "They've been increasing, so I guess the people are buying them."

Why? One reason, says Edward C. Percy, director of the sports-medicine program at the University of Arizona, is that the economic and social rewards for athletes who win are greater today than ever before. Because they are unable to face the possibility of failure—or even of placing second or third—he says athletes compromise their health (and empty their wallets) using drugs they believe will help them win.

"In our society, failure is unacceptable," Dr. Percy says. "When you see people in the stands putting a finger up in the air, they mean they want to be No. 1. It's not important to be No. 2 or No. 3."

"Everybody wants an edge on the other guy," says Clayton L. Thomas, a former member of the Olympic medical committee who is vice-president for medical affairs at Tampax Inc. and a consultant on population sciences at Harvard University's school of public health. "So if athletes want to get increased performance and they hear that a certain drug will do it, they use it."

NCAA Panel Involved

In an effort to curb that tendency, the National Collegiate Athletic Association established an internal panel last month to study drug-related problems in intercollegiate sports and to recommend ways of reducing the problem.

While the association considers the use of marijuana, tobacco, and alcohol the major drug problems among college athletes, Eric D. Zemper, its research coordinator, says it is also concerned about employing drugs to improve athletic performance. In a survey released last week, the association found that 95 per cent of the more than 1,000 varsity athletes in swimming, football, basketball, and track and field in the Big 10 who were surveyed said they had "never used drugs to attempt to improve performance."

Yet the same survey showed that 35 per cent of the coaches, trainers, and physicians who responded believed anabolic steroids helped athletic performance. Only 57 per cent believed they were harmful.

The N.C.A.A. condemns the use of nontherapeutic drugs among athletes and recommends that its members "agressively" combat the problem. But except for N.C.A.A. championship events, the association doesn't ban the drugs or administer drug tests to athletes. The N.C.A.A.'s executive committee can authorize drug tests, says Mr. Zemper, but "to my knowledge it's never been done."

Expense is the main reason for not using them. Drug tests given to 2,080 of the 7,000 competitors at the Montreal Olympics in 1976, for example, cost more than $1.6-million, even with volunteer help.

Dr. Percy, who has served on a number of Olympic and Pan American Games committees, estimates that without volunteers the cost would have reached $3-million in Montreal. A similar testing program today, he adds, would cost about $6-million—money that many countries say should be used to train athletes.

Although drug tests are designed to protect the health of athletes as well as to insure that they depend only on their innate or developed skills in competition, the tests can create legal problems for the those who administer them.

"It's darn hard," says Dr. Percy, "because the athlete is going to say, 'Look, it's my health and I should be able to do what I want with my body.' "

Despite the difficulties, Dr. Percy favors the use of drug tests in international competition and advocates using them in college sports, perhaps on a random or occasional basis to hold down the cost.

"It's expensive, but the materials [to conduct the tests] are available at any university," he says.

Allan J. Ryan, editor of *Physician and Sports Medicine* magazine, feels differently. He says he adamantly opposes drug tests because they haven't decreased drug use in competition and "will only convince athletes that what they're being banned from is going to help them."

"Drug testing [at international athletic events] has been going on for 15 years, but drug use has been increasing," he adds.

Jerome H. Patmont, team physician at the University of California at Berkeley, advocates the use of drug tests in professional sports but says they would be "a waste of money today" in collegiate play. But in the future, he says, improved laboratory techniques and "the threat of asking somebody to urinate in a bottle before a contest will be of some value to us" in controlling drug abuse.

Whether or not drug tests will help the situation, the fact is that some college athletes abuse drugs in competition. And despite the N.C.A.A.'s policies, many trainers and physicians condone the use of the drugs.

Mr. Pearson and David L. Costill, director of the human-performance laboratory at Ball State, found in their survey that 36 per cent of the college champions they surveyed had received steroids (which are legally available only by prescription) from physicians. Nine per cent had received them from pharmacists, 10 per cent from athletic trainers, and 45 per cent from other sources—veterinarians, for example, or athletes who buy steroids legally in Europe and Mexico.

Twelve of the 37 Big 10 trainers who responded to the N.C.A.A. survey said they believed anabolic steroids helped athletic performance, and 7 of the 23 team physicians agreed.

Should NCAA Do More?

What, then, can be done? Many experts on sports medicine believe that acquainting athletes and their coaches and trainers with the dubious value and health hazards of drug doping will help. In previous years, the N.C.A.A.'s drug-education committee has issued books and posters for athletes and their coaches about drug use, a practice that sports physicians say should be continued.

However many experts, including Peter Jokl, an associate clinical professor of orthopedic surgery at Yale University and the institution's team physician, believe the N.C.A.A. and its members should do more.

They should make it clear to athletes that drugs cannot be used in competitive sports and then should enforce that rule, Dr. Jokl says.

The N.C.A.A. and the colleges "ought to address themselves to the issue," says Dr. Patmont of Berkeley. "Institutions should say that athletes found using drugs will be cut from the team."

In addition, trainers and physicians who dope their athletes with drugs "ought to be disciplined by their own societies," he says.

For trainers and coaches to claim that if they don't administer the drugs, their athletes will use them unsupervised is "a cop-out," Dr. Patmont says.

"Some athletes think that if one pill is good, 100 must be better," says Dr. Thomas.

"As deliverers of health care to athletes, we should be loud and clear about what's right and what's wrong," says Dr. Patmont.

Even if the drugs did help athletic performance, he adds, "I'd still rather be third-rate than be ethically, morally, and medically wrong."

Education by team physicians may help. Dr. Jokl, for example, tells his athletes at Yale that well-documented studies show that no substance has ever been found to improve athletic performance.

"When students come to me to ask for a prescription," he says, "I tell them I'll give them a prescription if they can find one article that says it [a steriod] will help their performance." Many of them return from the library, he adds, saying they no longer want the drug after reading about the harmful side effects.

But the majority of young people, "particularly athletes, are not interested in listening," says Dr. Percy, who often lectures to students about the dangers of drugs.

"They say 'Come on, Doc, you're behind the times.' "

Dr. Thomas says curbing drug use among college athletes is crucial because many of them are models for high-school players, who are increasingly developing alcohol and drug problems.

If champions who don't use drugs would publicize that fact, says Mr. Lamb of Purdue University, it would be a great help.

"Testimonials from champions [who use drugs] is where drug use got started in the first place," he says.

The Substances Athletes Use

Following are some of the substances used by athletes to improve their performance, change their weight, or deal with the pain and pressures of athletic competition:

▶ Alcohol is used in small amounts by marksmen to steady their aim, by wrestlers as a diuretic, and by distance runners to replace carbohydrates after a long run. It is also used by athletes to reduce pain, overcome fear and pain, increase self-esteem, and relax their muscles. Even in small amounts, however, alcohol decreases coordination, reaction time, depth perception, and muscle strength.

▶ Amphetamines and other psychomotor stimulants, including cocaine and benzphetamine, reduce pain and delay exhaustion. Some athletes believe these stimulants allow them to perform at higher levels for longer periods. Others believe they make athletes more vicious. These drugs can be addictive and can cause hypertension, loss of appetite, intracranial hemorrhage, and death.

▶ Anabolic steroids, androgenic hormones, and testosterone-like synthetic drugs are used by weight throwers, body builders, swimmers, and football players to increase strength and muscle mass.

The American College of Sports Medicine says in a position paper that use of steroids neither helps nor hinders athletic performance, and most physicians questioned by *The Chronicle* agree with that assessment. However, David R. Lamb, director of the exercise-physiology laboratory at Purdue University, says about half of the well-conducted scientific studies published verify that steroids do increase strength slightly—by about eight to ten kilograms in the bench press, for example.

Mr. Lamb says that while he believes steroids may help some people and have no effect on others, "I wouldn't advise anybody to take them, because of the side effects." Those include a decrease in sperm production and in the size of testicles in men, infertility and baldness in women, liver problems, and acne.

▶ Aspirin, as well as other non-narcotic analgesics and anti-inflammatory drugs, are used by athletes to reduce pain and to make it possible to perform with an injury. However, some of those drugs cause stomach problems, confusion, and lethargy.

▶ Caffeine has gained popularity as an easily obtained cardiac and respiratory stimulant that is claimed to increase muscle efficiency and decrease fatigue. The drug, however, can cause nervousness, insomnia, and rapid heartbeat.

▶ Nicotine, such as that obtained by chewing tobacco, is sometimes used as a stimulant, but actually decreases athletic performance.

▶ Tranquilizers and other sedatives, such as barbituates, are sometimes used to counteract nervousness before an athletic event or to promote sleep. By slowing response and reaction time, however, they increase the risk of injury. They are also addictive and can cause death.

▶ While not usually considered drugs, protein supplements and large amounts of vitamins B, C, and E are thought to promote athletic performance. Some athletes believe an excessive consumption of protein will increase strength and build muscle. However, the body does not store protein, and more energy is used to digest it than it produces. In addition, vitamins B, C, and E, according to physicians, do not improve endurance, muscle efficiency, or motor performance. —K. McD.

Sources: *Drugs and Athletic Performance*, by Melvin H. Williams, 1974; *Comments in Sports Medicine*, edited by Timothy T. Craig, American Medical Association, 1973; "Drugs in Sports," by Howard C. Mofenson and Joseph Greensher, *New York State Journal of Medicine*, January, 1980; "The Amphetamine Margin in Sports," by Victor G. Laties and Bernard Weiss, *Federation Proceedings*, October, 1981.

NCAA Makes Concessions to Football Powers

LAKE OZARK, MO.

In a concession to the big football powers, the council of the National Collegiate Athletic Association has paved the way for those institutions to have greater representation on the council and has endorsed tougher academic requirements for freshman athletes.

The council, meeting here, also set the stage for increasing financial aid to student athletes and recommended barring people not employed by the colleges, including alumni, from recruiting activities.

The council's decisions are not binding, but will be considered by N.C.A.A. members at the association's national convention in January. In the past, the N.C.A.A. membership has approved most recommendations by the council.

The council adopted a plan to enlarge its membership from 20 to 44, and guaranteed Division I institutions 22 council seats. Division II and Division III institutions each would have 11 seats. Division I institutions now have 10 seats and Division II and Division III institutions each have 5.

Under the new plan, each division would elect its own council members. All N.C.A.A. members now may vote on candidates for the council from all divisions.

Response to Complaints

The restructuring of the council is a concession to top football powers, 62 of which are allied as the College Football Association.

The C.F.A. members have complained that Division II and Division III institutions, which have different needs and problems, have exerted too much control within the N.C.A.A. C.F.A. institutions have also complained that they are underrepresented on the N.C.A.A. council.

The council voted to "support in principle" tougher academic requirements for freshman athletes, a position favored by the College Football Association. The N.C.A.A. staff will draft a number of proposals to tighten those requirements, including one that would raise the 2.0 high-school-grade average that athletes must now have to play sports in their freshman year. It will also draft a proposal to raise the amount of financial aid that may be awarded to student athletes. —N. SCOTT VANCE

26 University Presidents to Probe Sports Abuses

By MALCOLM G. SCULLY

WASHINGTON

A committee of 26 college and university presidents has been established by the American Council on Education to seek quick and specific solutions to abuses in intercollegiate athletics.

Derek C. Bok, president of Harvard University and 1981-82 chairman of the council, will head the committee.

It will hold its first meeting on September 26 and hopes to have proposals for reforms in such areas as recruiting and academic eligibility for consideration at next January's meeting of the National Collegiate Athletic Association.

"Recent charges involving illegal payments to student athletes, transcript manipulations, and other alleged abuses are injuring the reputations of some of the nation's finest institutions," said Jack W. Peltason, president of the council.

The group will include only college and university presidents and will, according to one member, continue to work until it feels that substantive changes have been made to improve campus practices.

The creation of the council's committee comes at a time when the N.C.A.A. also has set up a special committee on abuses in intercollegiate athletics.

Unlike the council's committee, the 16-member N.C.A.A. panel includes athletic directors and coaches as well as presidents.

"It's fair to say that there are a lot of chief executives who feel that you can't leave all athletic matters to the N.C.A.A.," said Robert H. Atwell, vice-president of the council.

While members of the committee said it was too early to specify what kinds of recommendations it would make, several suggested that it would re-examine, among other things, the question of whether freshmen should be eligible to take part in intercollegiate competition.

Following are the names of the members of the American Council's committee.

Derek C. Bok, Harvard U., *chairman.*
Thomas G. Carpenter, Memphis State U.
Fred C. Davison, U. of Georgia.
Edward Foote, U. of Miami.
William C. Friday, U. of North Carolina.
David P. Gardner, U. of Utah.
William P. Gerberding, U. of Washington.
Sheldon Hackney, U. of Pennsylvania.
Edward H. Jennings, Ohio State U.
Donald Kennedy, Stanford U.
Cecil Mackey, Michigan State U.
J. Donald Monan, Boston College.
John W. Oswald, Pennsylvania State U.
Wesley W. Posvar, U. of Pittsburgh.
Ronald W. Roskens, U. of Nebraska.
John W. Ryan, Indiana U.
James R. Scales, Wake Forest U.
Harold T. Shapiro, U. of Michigan.
L. Donald Shields, Southern Methodist U.
Otis A. Singletary, U. of Kentucky.
Bernard F. Sliger, Florida State U.
Howard R. Swearer, Brown U.
Joab L. Thomas, U. of Alabama at Tuscaloosa.
Barbara S. Uehling, U. of Missouri at Columbia.
Charles E. Young, U. of California at Los Angeles.
James H. Zumberge, U. of Southern California.

Sports Notes

Ga. Supreme Court to Rule in Cable-Television Suit

The Georgia State Supreme Court is expected to decide this week whether the Turner Broadcasting System, a cable-television network, may telecast 19 college football games this fall to Atlanta viewers.

ABC television has sued the National Collegiate Athletic Association, contending Turner Broadcasting's plans to televise the games violate ABC's contract with the N.C.A.A. ABC and CBS have contracts with the N.C.A.A. guaranteeing them exclusive rights to noncable telecasts of college football.

Turner Broadcasting has a contract with the N.C.A.A. to televise football games over its cable network, but to do that, it plans to telecast the games from Atlanta to its cable satellite. Such a procedure would allow Atlantans, even those without cable, to receive the games.

Former Grambling Coach Sues for $1-Million

Nathaniel C. Perry, a former track coach at Grambling University, has sued that institution for $1-million, claiming he was fired for trying to save Grambling from possible trouble with the National Collegiate Athletic Association.

Mr. Perry says he lost his job because he angered Edward Robinson, the athletic director and football coach, by questioning him about an athlete on a track scholarship who was trying out for the football team.

According to his lawyer, Mr. Perry was concerned that allowing the athlete to take part in the spring football audition violated the N.C.A.A.'s rule allowing only 30 holders of athletic scholarships to participate in football.

Mr. Robinson said Mr. Perry had been fired for "lack of progress" in the track program and that the N.C.A.A. had since confirmed that the tryout did not violate the rules.

Judge Appointed, Date Set in AIAW Lawsuit

A new judge has been appointed and a new trial date set for the Association for Intercollegiate Athletics for Women's lawsuit against the National Collegiate Athletic Association.

Judge Thomas P. Jackson, who was appointed in May to the U.S. District Court for the District of Columbia, was given the suit as part of his initial caseload. He moved the trial date from August 25 to October 18.

The A.I.A.W., which will not operate this year, charges the N.C.A.A. with using money and influence from its men's sports programs to lure institutions away from the A.I.A.W. The N.C.A.A. argues that the women's association is the would-be monopolist, trying to prevent the N.C.A.A from entering the governance of women's sports.

People

Merrily Dean Baker, associate director of athletics at Princeton U., to director of women's athletics at U. of Minnesota at Minneapolis.

Edward E. Bozik, assistant chancellor at U. of Pittsburgh, to director of athletics.

John Chaney, basketball coach at Cheyney State College, to basketball coach at Temple U.

Cedric Dempsey, athletic director at U. of Houston, to athletic director at U. of Arizona.

Don DiJulia, former athletic director at St. Joseph's U., to commissioner of East Coast Conference.

Sharon Holmberg, director of women's athletics at Simpson College (Iowa), to executive director of the Mountain West Athletic Conference.

This announcement appears as a matter of record only.

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NCAA Recommendations

MISSION, KAN.

Following are the recommendations of the Drug Education Committee of the National Collegiate Athletic Association concerning drug-education programs for athletes.

The N.C.A.A. Drug Education Committee strongly urges athletic departments at all member institutions to implement the following minimal elements of a drug-education program for their student athletes:

1

Schedule at the beginning of each school year a course of drug and alcohol awareness for all men and women athletes.

Rather than trying to develop their own programs, it is suggested that each institution utilize the resources and expertise already available in most communities. These programs should be aimed particularly at the new student athlete and should emphasize the deleterious effects of drugs on athletic performance as well as on other aspects of life. If possible, a former athlete who has had a drug problem should be used for maximum impact.

It is also suggested that a minimum of three sessions be scheduled: one dealing with alcohol; a second with other drugs; and a third with the legal aspects of drug use, and any other problems reasonably unique to the student athlete that the institution might wish to cover (*e.g.*, gambling).

2

Each member institution should develop and have in place a plan for treatment of student athletes with drug or alcohol-related problems.

Such plans should utilize treatment centers and programs available in the local community, and should emphasize rehabilitation rather than punishment. It is obviously more prudent to have such a plan in place before rather than after a problem develops.

3

Coaches should become more aware of potential drug-related problems in student athletes, and specifically should be an available source of support if a student athlete does develop a drug- or alcohol-related problem.

4

In relation to recommendation No. 3, the athletic department at each member institution should schedule training sessions for all coaches, trainers, and team physicians to present information on how to recognize and handle drug- and alcohol-related problems.

Percentage of Big 10 Athletes Who Use Drugs

	First-year students	Upper-classmen	By sport Football	Track	Swimming	Basketball
Illegal substances						
Heroin	0.0%	0.2%	0.0%	1.0%	0.0%	0.0%
LSD-PCP	0.0%	1.5%	1.0%	1.0%	3.0%	0.0%
Downers (Quaaludes)	1.0%	3.0%	2.0%	2.0%	3.0%	1.0%
Amphetamines	3.0%	6.0%	6.0%	3.0%	5.0%	4.0%
Cocaine	2.0%	7.0%	7.0%	4.0%	5.0%	4.0%
Marijuana	13.0%	22.0%	22.0%	16.0%	19.0%	10.0%
Controlled substances						
Anabolic steroids	1.0%	2.0%	2.0%	3.0%	1.0%	1.0%
Other substances						
Alcohol	60.0%	65.0%	63.0%	62.0%	72.0%	42.0%
Smokeless tobacco	15.0%	18.0%	20.0%	5.0%	11.0%	9.0%
Cigarettes	1.0%	2.0%	1.0%	2.0%	3.0%	0.0%

SOURCE: NATIONAL COLLEGIATE ATHLETIC ASSOCIATION

Drug-Education Programs Urged

Continued from Page 25

helpful; 12 of 37 trainers said they were helpful, and 7 of 23 team physicians agreed.

Those findings, said Eric Zemper, the N.C.A.A.'s research director and a member of the panel, were partly responsible for the committee's recommending drug-training sessions for coaches, trainers, and team physicians, as well as for athletes. "We've got to educate the educators," he said.

The committee recommended a four-point drug-education and treatment program for its member institutions.

"Education is the only way we can combat drug abuse," said the committee's chairman, Carl Blyth, professor of physical education at the University of North Carolina at Chapel Hill. Athletes must learn that "there's no rhyme or reason to spending hours building up your body and then tearing it down" with drugs, he said.

The committee designated alcohol use the "primary problem" to be addressed by institutions, Mr. Zemper said, largely because there is little information on the subject available to student athletes. The survey provided no indication of how many alcohol users were also abusers.

While panel members stressed the importance of using outside experts in the educational programs, of equal importance, they said, is the direct and visible involvement of coaches in the programs. "It was very clear from the students' responses that they want the involvement of the head coach," Dr. Murphy said. "They would say things like, 'I want to know how the coach feels about all this. I want him to tell me.' "

Tests Called a Mistake

While acknowledging drug use as a serious problem, Dr. Murphy and Mr. Blyth said testing athletes for traces of drugs would be a mistake.

"Test results aren't always correct, they're very expensive, and they're degrading," Dr. Murphy said. When a coach or trainer "turns to them and says, 'I want to check a urine sample,' it destroys the relationship" between the official and the athlete, he said.

Coaches, physicians, and trainers view drug use as a more serious problem than do student athletes, the survey indicated. Sixty per cent of the athletes surveyed said drug use was "not a problem," while only 28 per cent of the university officials agreed with them. Fifty seven per cent of the officials called drug use a "slight problem" and 15 per cent called it a "growing problem."

That difference in perception may exist because students know drug use is waning, according to Alan Ryan, editor of *Physician and Sports Medicine* magazine. He was not affiliated with the N.C.A.A. committee.

"The big wave of drug use by college athletes has reached its peak and is passing over. The students see that, but the coaches and physicians are less aware of the current trend," said Dr. Ryan, who was team physician at the University of Wisconsin at Madison for 11 years.

Dr. Ryan approved of the committee's recommendations and agreed with the survey's finding that the rate of drug use among student athletes was generally the same as the rate among all college students.

Committee members said they were surprised by the proportion of students—18 per cent—who said they used smokeless, or chewing, tobacco.

"The assumption seems to be that it's a safe alternative to cigarettes, but it isn't," Mr. Zemper said. "They're just trading lung cancer for oral or throat cancer."

Dr. Murphy said he was "pleasantly surprised" that the survey showed a low rate of hard drug use among athletes.

"Everybody's making generalizations," he said. "They say, 'The pros, the college kids, the high-school kids are all on cocaine and other drugs.' The survey shows it's just not true."

Athletes Can Get Drug Counseling

MADISON, WIS.

A number of colleges and universities offer their student athletes counseling on drug use. Some run their own programs and others contract with outside professionals.

Ronald Heitzinger and his brother Donald have been providing drug-education services to the University of Wisconsin at Madison and, starting this fall, will do the same for Beloit College and the University of Iowa. They also provide drug counseling to six professional football teams.

The colleges pay the Heitzingers to hold two-hour "prevention sessions" with student athletes and to train a "core team" of university officials to continue an assistance program throughout the year. The students are given basic information about drug abuse and are told that they can go to any member of the core team for help if they have or develop a drug problem.

"In our first year at Wisconsin," Donald Heitzinger said, "there were 57 referrals to the core team. Twenty-seven of those were self-referrals and 25 were referred by coaches." The eight-to-nine-member core team is made up of faculty advisers, team physicians, trainers, and coaches.

"Once the coaches saw who we were and what we were doing, they would refer students" to the core team, Donald Heitzinger said.

—N.S.V.

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News Summary

Articles on inside pages

Columbia College in Chicago has grown in 20 years from a near-bankrupt speech-and-broadcasting school to a thriving, career-oriented, liberal-arts college. Story on Page 4.

"Suspicious manuscripts" containing inconsistent or startling data may be a sign of scientific fraud, editors at the annual meeting of the American Psychological Association were told. Story on Page 6.

Congress returns from a recess this week to the problem of whether to override President Reagan's veto of the $14.2-billion supplemental appropriations bill. Story on Page 7.

About 30,000 fewer veterans are receiving Pell Grants this year than last. Story on Page 7.

Televising college sports nets hundreds of thousands of dollars for many institutions, but not everyone is happy about the way the money is divided up. Story on Page 13.

Three colleges have been suspended from the National Association of Intercollegiate Athletics for using ineligible players on their basketball teams. Story on Page 13.

Polish officials are using the demonstrations there last week to drive a wedge between workers and academics. Story on Page 17.

Almost half of Russia's college graduates do not get jobs in the fields for which they were trained. Story on Page 17.

In Lebanon, investigators of the kidnaping of David S. Dodge, former acting president of the American University of Beirut, expect a break in the case soon. Story on Page 17.

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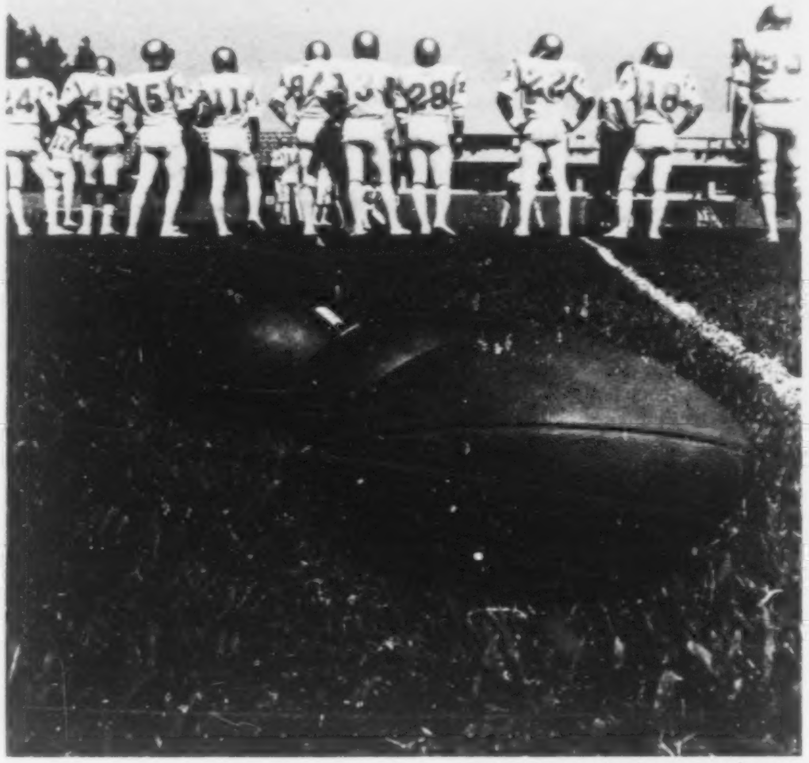
GIANT FOOTBALLS INVADE UCLA



PHOTOGRAPH FOR THE CHRONICLE BY TERRY O'DONNELL

They called this session a "photo opportunity." Our opportunist made this shot, then took off in sheer fright.

Interest in 'Computer Literacy' Sets Off Big Textbook Boom

By KAREN J. WINKLER

Computer science is the new kid on the block of college-textbook publishing. While formal textbooks in the field only began to appear a little over 20 years ago, today they number in the thousands.

▶ Prentice-Hall, the largest publisher in computer science, lists some 1,000 computer-related text and reference books.

▶ Addison-Wesley Publishing Company projects that computer-science books will account for over 15 per cent of its textbook sales in 1982, compared with 0.5 per cent in 1974.

▶ All told, there are some 3,000 computer-science texts available to undergraduates, says Doris Lidtke, a professor of computer science at Towson State College who compiles a yearly list of such books for libraries. That figure includes only books used in computer-science courses, not those on applications of computers in, for example, biology or science classes.

Market 'Opening Up'

"Until the last few years, computer science hasn't been one of the largest areas for textbooks, but now the term 'computer literacy' is beginning to mean something, and that is opening up the market," says J. Daniel Couger, a professor of management science at the University of Colorado at Colorado Springs. Mr. Couger edits *The Computing Newsletter* for business schools, which runs a yearly list of computer-science textbooks.

"I see the market growing just as large as any introductory subject required of all students—like English," he says.

"Twenty-five years ago," says Karl Karlstrom, longtime computer-science editor at Prentice-Hall, "there were almost no books.

"The universities began to teach the courses, and then the books followed."

In 1960, he says, there were probably a couple of dozen books available, mostly introductory texts covering the languages

Continued on Page 21, Column 2

Increase Sought for Science Education

A key GOP Senator asks $10 million more for NSF

By KIM McDONALD

WASHINGTON

Several Republican members of Congress, including a key Senator, are trying to get more money for science education, even though President Reagan has proposed eliminating all such programs except graduate fellowships.

And there are signs that even some White House aides would like to see the President relax that stand.

Three Republican members of Congress, including Sen. Harrison H. Schmitt of New Mexico, chairman of the Senate Subcommittee on Science, Technology, and Space, have introduced bills that would give money to young faculty members in scientific fields and support the training of science teachers for elementary schools.

Senator Schmitt is also attempting to get $10-million added to the $25-million recommended by the Senate Committee on Labor and Human Resources for science-education programs at the National Science Foundation in fiscal 1983. The House of Representatives has already voted to authorize $35-million.

'We've Got a Problem'

Bruce Abell, a special assistant to George A. Keyworth, II, President Reagan's science adviser, said the Administration still believed science education to be "a state and local responsibility." But Congressional aides say some Administration officials are working behind the scenes to find ways to provide more federal support for science education.

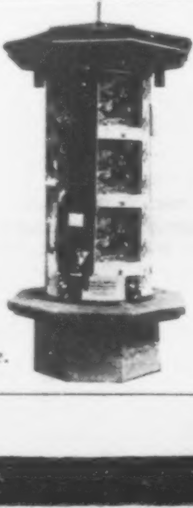
One aide said the President's Cabinet Council on Human Resources was reviewing recommendations that the Administration agree to support other science-education programs besides graduate fellowships.

"They agree that we've got a problem in the science- and engineering-education area," he said.

The House Appropriations Committee

Continued on Page 8, Column 1

Events in Academe: A Special Pull-Out Section



- Chronological listings from September through March: Page 32
- Index to subjects of meetings: Page 31
- Index to sponsoring organizations: Page 28
- Deadlines for fellowships, grants, papers, and prizes: Page 44
- One man's memories of scholarly meetings: Page 46

Readers may want to save this section for future reference.

Journal Editors Advised to Be Alert to Possibility of Scientific Fraud

Questionable material can undermine public support and waste the time of other investigators

CHERYL M. FIELDS

WASHINGTON

Scientific fraud can be hard to spot, but editors of science journals should be alert to "suspicious manuscripts," according to Marcia Angell, deputy editor of the *New England Journal of Medicine*.

Editors and their peer reviewers can't possibly check all the data on which the manuscripts they receive are based, she told a meeting of journal editors at the annual meeting here of the American Psychological Association.

"But they can be alert to such things as inconsistent data, data that are too neat, or data that are too startling—such as manuscripts that describe a giant step although science usually proceeds in small steps—or manuscripts that lead away from conclusions that other researchers in the field are drawing," Dr. Angell said.

Other things to watch out for, she said, are manuscripts that depend primarily on the researchers' own previous work, or too many articles' being published by an investigator. For example, she noted that a researcher at Harvard University's medical school, who was found last year to have concocted data for at least one study, had published nearly 100 papers and abstracts in a two-year period.

"That should have raised some eyebrows," she said.

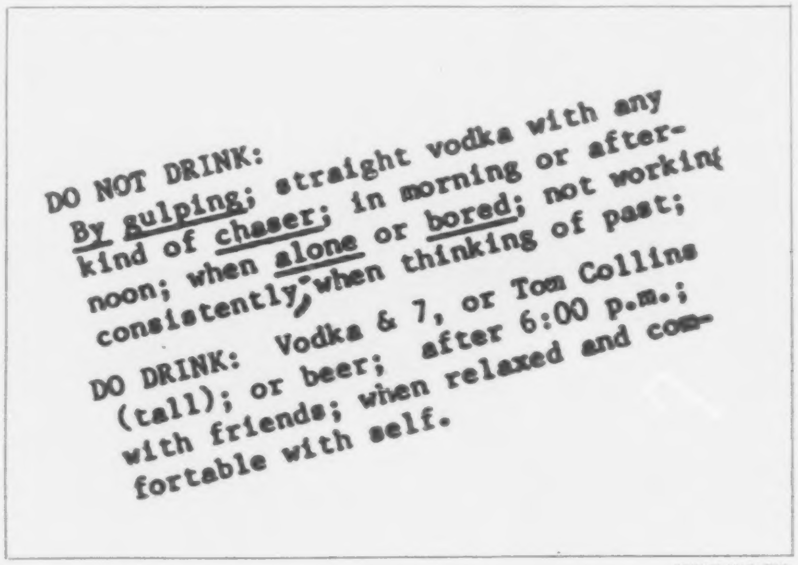
"If your peer reviewers raise questions about a paper, for example saying that the methods the researchers used couldn't have produced the results they claimed," she told the editors, "don't hesitate to send the paper out for a second round of reviews."

At the *New England Journal*, she said, if questions remain, "we will telephone the experimenters and ask for more information."

"Our responsiblity to preserve the integrity of the field is greater than our responsibility to publish a particular article," she said, because fraud in science undermines public support, lowers the morale of co-workers of the scientists caught falsifying or manipulating data, and wastes the time of other investigators, who have to go back and repeat the faulty work.

A Human Toll

Questionable studies can also take a human toll, said Nancy M. Henley, a professor of psychology at the University of California at Los Angeles and editor of the *Psychology of Women Quarterly*.



DO NOT DRINK:
By gulping; straight vodka with any
kind of chaser; in morning or after-
noon; when alone or bored; not working
consistently, when thinking of past;

DO DRINK: Vodka & 7, or Tom Collins
(tall); or beer; after 6:00 p.m.;
with friends; when relaxed and com-
fortable with self.

SCIENCE MAGAZINE

"Science" magazine recently published a study following up a controversial project in which researchers reported they had trained alcoholics to control their drinking without giving it up entirely. Above, part of a wallet-sized card given to subjects in the original study.

She noted that *Science* magazine had published in its July 9 issue a 10-year follow-up study of a controversial project in which two researchers, Mark B. Sobell and Linda C. Sobell, had reported that, using behavior-modification techniques, they had successfully trained 20 alcoholics to control their drinking rather than totally abstaining from alcohol. Many researchers believe that total abstinence is necessary for people who have become physically dependent on alcohol.

"This research not only has been cited widely in popular literature, but has also been picked up in textbooks on medicine and psychology," Ms. Henley said.

Both the Sobells' published accounts of the experiment, and a follow-up study by other researchers three years later said that, based on repeated and extensive interviews with the subjects and their relatives, the Sobells' subjects were doing better than a control group trying to abstain from alcohol entirely.

However, Ms. Henley said, officials of Patton State Hospital in California, where the original experiment was conducted, persuaded three other researchers to do the 10-year follow-up because they knew that many of the subjects had been rehospitalized with drinking problems.

As reported in *Science*, the follow-up found that only one of the 20 alcoholics had "maintained a pattern of controlled drinking; eight continued to drink excessively—regularly or intermittently—despite repeated damaging consequences; six abandoned their efforts to engage in controlled drinking and became abstinent; four died from alcohol-related causes; and one, certified about a year after discharge from the research project as gravely disabled because of drinking, was missing."

No 'Probing Questions'

The new study reported data showing that many of the research subjects had been readmitted to hospitals because of drinking problems within a few months of the experiment.

Added Ms. Henley: "Some of the subjects of the study have organized to try to get the word out that alcoholics must be abstinent. They have said that contrary to what the Sobells claimed, there was very little contact with them after the program ended. If the researchers did telephone, they just chatted and did not ask the probing questions that would have revealed the problems the subjects were having."

Mary L. Pendery, one of the researchers who conducted the 10-year follow-up and a psychologist in the medical school at the University of California at San Diego, said the missing subject in the original experiment had been located since the article appeared in *Science*. He also reported having had continued drinking problems and little contact with researchers after the behavior-modification experiment ended, said Ms. Pendery, a psychologist in the medical school at the University of California at San Diego.

However, she said, neither the Sobells nor any of the investigators who published the three-year follow-up has acknowledged any impropriety in the conduct of their studies or in the published reports on them. Those researchers all have responsible positions, she said, and "all are being supported by their superiors, who are not asking for documentation of their studies."

Such situations can pose considerable problems for journals, Ms. Pendery said, noting that the Sobells had hired a prestigious Washington law firm to protect their interests when they learned that *Science* intended to publish the 10-year follow-up.

The Sobells, who are now conducting research at a World Health Organization foundation in Toronto devoted to investigating alcohol and drug dependence, have said they stand by their research and publications and that they believe a committee appointed by the foundation to review their work will vindicate them.

Worried over Lawsuits

A number of editors at the meeting said they were concerned about being sued if public controversies developed about articles printed in their journals, and they questioned their legal right to demand raw data from investigators.

If questions are raised about a manuscript before it is published, said Dr. Angell, "you can just refuse to publish."

Ms. Pendery said it was ironic that "journal editors can face legal threats in attempting to publish material that might expose a fraud, but they are in no danger if they publish a fraudulent study."

"Out-and-out fraud—the fabrication of data," Dr. Angell added, "is just one end of a spectrum of questionable scientific behavior," which also can include:

▶ " 'Fragmentation': publishing early, often, and in the smallest possible segments."

▶ "Statistical hanky-panky."

▶ " 'Cooking' data by ignoring results that don't fit the hypothesis."

▶ "Smoothing out data so that a line in a graph, for example, is straight instead of almost straight."

Some journals in recent years have published retractions when research studies were found to have been fraudulent or questionable, Dr. Angell said, but scientists haven't followed up by insuring that such studies are deleted from computerized indexes of journal articles.

She said the editor of one medical index had told her that he had never been asked to delete references to studies that were later called into question.

Journal editors also should insure that their publications are indexed so that references to retractions appear alongside references to the original article, Dr. Angell said.

Changes in Graduate Enrollment, 1980-81 to 1981-82

	Education	Humanities	Social sciences	Physical sciences	Engineering	Biological sciences
Institutions granting Ph.D. degrees	− 4.9%	− 2.2%	+ 2.4%	+ 4.8%	+ 6.9%	+ 0.3%
Public	− 4.4%	− 2.5%	+ 3.4%	+ 2.9%	+ 9.0%	n.c.
Private	− 7.4%	− 1.2%	+ 0.2%	+10.2%	+ 3.0%	+ 1.5%
Institutions granting master's degrees	−13.2%	+ 0.5%	+ 4.2%	+ 9.4%	+ 5.4%	− 3.4%
Public	−13.7%	− 0.5%	+ 3.0%	+ 8.2%	+ 5.1%	− 4.2%
Private †	− 7.6%	+15.2%	+10.9%	+22.4%	+ 9.0%	+ 5.4%
Total	− 7.0%	− 1.9%	+ 2.6%	+ 5.1%	+ 6.8%	− 0.1%
Public	− 6.9%	− 2.3%	+ 3.3%	+ 3.2%	+ 8.7%	− 0.5%
Private	− 7.4%	− 0.7%	+ 1.0%	+10.4%	+ 3.1%	+ 1.8%

† Because of low response rate, data for institutions in this category may be less reliable than those in other categories.
n.c. No change

SOURCE: SURVEY OF 363 GRADUATE INSTITUTIONS BY THE COUNCIL OF GRADUATE SCHOOLS IN THE UNITED STATES AND THE GRADUATE RECORD EXAMINATIONS BOARD

75-1 9/17/82

Jean Long
SRI

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News Summary

Articles on inside pages

The Pentagon barred the reading of a large number of scientific papers at a recent conference in San Diego at which Soviet scientists were present. Story on Page 12.

The State Department has modified procedures for monitoring the activities of visiting Chinese scholars on U.S. campuses. Story on Page 12.

College enrollment is up 1 per cent nationwide this fall, the Education Department projects, despite deliberate plans by some institutions to limit admissions. Story on Page 11.

The bitterness of the political conflict in the Middle East has spilled over into debates among American scholars who specialize in Middle Eastern studies. Story on Page 6.

Political scientists are increasingly being called as expert witnesses in court cases on social issues—and some are not happy about the trend. Story on Page 8.

An animal-protection bill under consideration by a Congressional committee could hinder scientific research. Story on Page 13.

Reaction is mixed to new magazines and newspapers devoted exclusively to sports programs at individual universities. Story on Page 17.

A Labor Party plan for higher education in Great Britain calls for open admissions at all universities, including Oxford and Cambridge. Story on Page 20.

Like the city it is in, the American University of Beirut is struggling to get back on its feet following the departure of the P.L.O. Story on Page 21.

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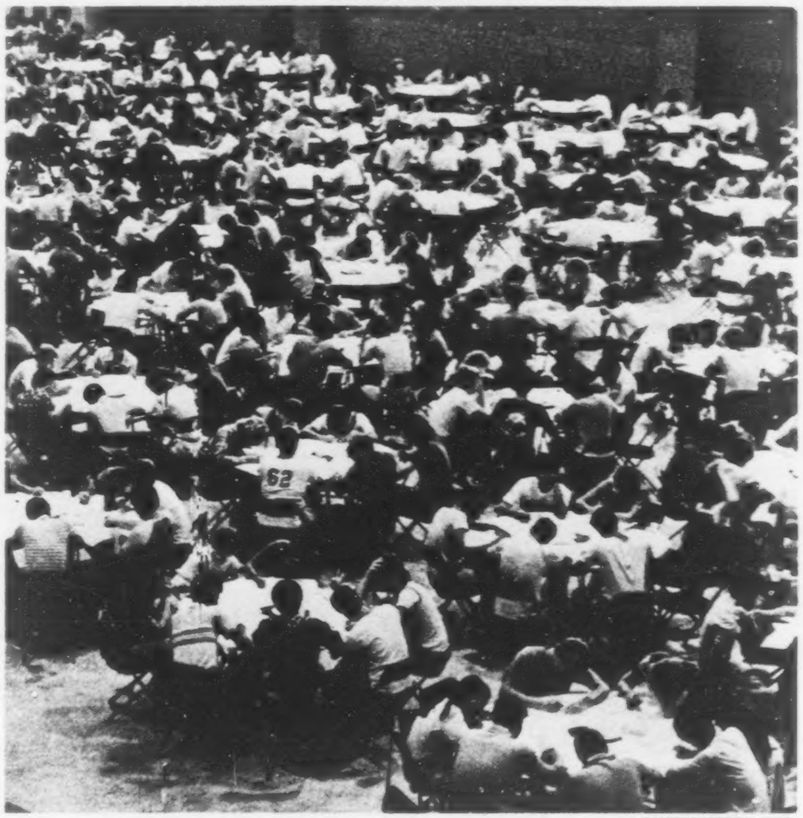
MEETING THE TEST AT M.I.T.



CALVIN CAMPBELL, M.I.T.

Starting with next year's freshmen, M.I.T. will require all students to show writing proficiency before they graduate. This year's freshmen missed the rule—but were encouraged to take the test, anyway (above).

Administration Won't Appeal Ruling that Limits Sex-Bias Law

By CHERYL M. FIELDS

WASHINGTON

In a move attacked by women's-rights leaders as a "clear retreat," the Reagan Administration has decided not to appeal a judge's ruling limiting the coverage of Title IX, a law barring sex bias in education, only to programs that directly receive federal dollars.

The decision contrasts sharply with two recent rulings by the U.S. Court of Appeals for the Third Circuit upholding a much broader application of the law. (See story, Page 17.)

Title IX of the Education Amendments of 1972 bars sex bias "in federally assisted education programs or activities."

U. of Richmond Case

The case that the federal government decided not to appeal involved the University of Richmond. In July, Judge D. Dortch Warriner, of the U.S. District Court for the Eastern District of Virginia, held that the Education Department's Office for Civil Rights had no authority to investigate the university's athletic program for sex bias because the program did not receive federal support.

He also barred the department "from investigating any other programs or activities at an educational institution within the jurisdiction of this court, absent a prior showing that such said program or activity is the recipient of direct federal financial assistance."

Judge Warriner specifically said that the receipt of federal grants and loans by students was not sufficient to bring their college or university under the coverage of Title IX.

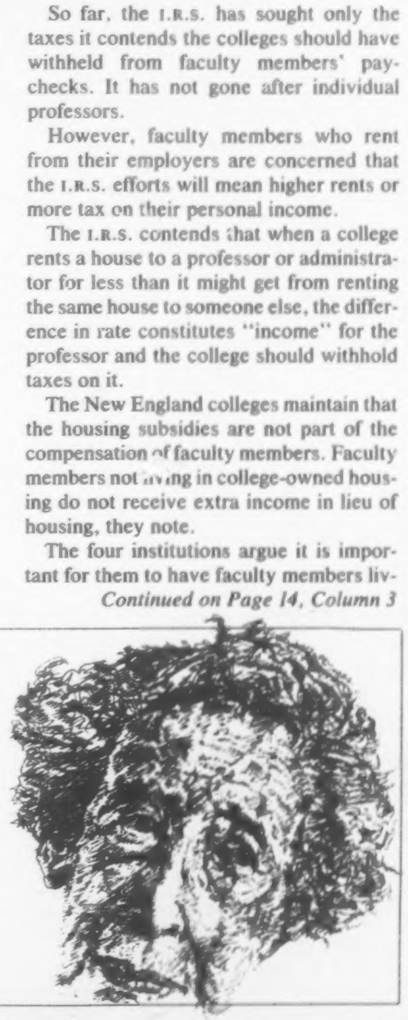
In August, however, the Third Circuit ruled that the Pell Grants received by students at Grove City College in Pennsylvania put that institution in the scope of Title IX and that the law applied even when the federal aid that a college received was indi-

Continued on Page 16, Column 1

A Life of Philosophy and Politics

Few scholars of the stature of Hannah Arendt, the philosopher and political theorist who died in 1975, have been as controversial as she—or as hard to categorize.

An article about a new biography of Hannah Arendt begins on Page 27.



Colleges Fight Attempt to Tax Faculty Housing

Retroactive withholding is demanded by IRS

By JACK MAGARRELL

WASHINGTON

Housing provided to faculty members at reduced rent by some colleges is under attack by the Internal Revenue Service.

If the tax collectors prevail, a college with a substantial faculty-housing program could be forced to pay "hundreds of thousands of dollars" in retroactive withholding taxes, according to tax advisers.

The issue has been raised by I.R.S. attempts to collect back taxes from four New England institutions. The four—Amherst College, Smith College, Wellesley College, and Wesleyan University—have asked Congress to block the I.R.S. move. The American Association of University Professors is supporting their efforts.

The I.R.S. has made its position in the Amherst and Wesleyan cases available to tax agents across the country. Tax lawyers say that increases the likelihood that other campuses may be subjected to similar actions.

IRS Seeks Withholding

So far, the I.R.S. has sought only the taxes it contends the colleges should have withheld from faculty members' paychecks. It has not gone after individual professors.

However, faculty members who rent from their employers are concerned that the I.R.S. efforts will mean higher rents or more tax on their personal income.

The I.R.S. contends that when a college rents a house to a professor or administrator for less than it might get from renting the same house to someone else, the difference in rate constitutes "income" for the professor and the college should withhold taxes on it.

The New England colleges maintain that the housing subsidies are not part of the compensation of faculty members. Faculty members not living in college-owned housing do not receive extra income in lieu of housing, they note.

The four institutions argue it is important for them to have faculty members liv-

Continued on Page 14, Column 3

Washington Notes

Reagan Approves Reduction in Patent Fees

President Reagan has signed into law a measure that halves the fees that universities, small businesses, and independent inventors must pay the government for registering new patents and extending existing ones.

Effective October 1, such groups must pay $150 to file a new patent and $600 to maintain it for 11½ years.

The bill, HR 6260, also would extend programs of the Patent and Trademark Office through fiscal 1985.

OMB Seeks Comment on Paperwork Rules

The Office of Management and Budget is seeking public comment on proposed new rules, published in the September 8 *Federal Register*, aimed at minimizing the amount of data the federal government collects from institutions, individuals, and businesses.

The rules, said an official of the office, outline how the agency will carry out its responsibility to enforce the Paperwork Reduction Act of 1980.

The public has until October 25 to comment on the proposal.

'Draconian,' Medical Schools Call Student-Loan Proposals

The Association of American Medical Colleges has denounced as "draconian" federal proposals aimed at stemming a delinquency rate that averages 12 per cent in Health Professions Student Loan.

The Department of Health and Human Services recently proposed regulations that would bar institutions with delinquency rates of over 5 per cent from making the loans and consider loans delinquent if they are more than 30 days overdue. The rules would take effect next March 31.

Thomas J. Kennedy, director of the planning and policy department of the medical-colleges association, said the proposals would mean the loan-repayment schedule at most institutions would have to be converted from an annual to a monthly basis.

"It's quite a formidable task to get everybody converted to a monthly payment schedule in six months," Mr. Kennedy said. "I think a 30-day delinquency rate is absurd," he added. "I think we are all for prompt payment of loans, but this is a little too much."

Colleges that did not meet the 5 per cent rate could make no new loans.

President Reagan Nominates Members of Science Board

President Reagan last week announced his intention to nominate four persons to the National Science Board, the policy-making arm of the National Science Foundation, for terms expiring in May, 1988:

Charles E. Hess, dean of the College of Agricultural and Environmental Sciences at the University of California at Davis.

John H. Moore, associate director and senior fellow at the Hoover Institution at Stanford University.

Norman C. Rasmussen, professor of nuclear engineering at the Massachusetts Institute of Technology.

Roland Schmitt, vice-president for corporate research and development at the General Electric Company.

Few Students Find Aid Covers Their Costs

	Financially dependent students	Financially independent students
Student expenses		
Tuition and fees	$ 921	$ 702
Room and board	1,577	2,912
Other	1,267	2,458
Total	3,833	6,125
Student resources		
Expected parent contribution	469	11
Pell grants	714	832
Supplemental grants	117	146
State grants	159	158
College grants	43	31
College work-study program	252	276
State and college work programs	94	171
National Direct Student Loans	156	161
Guaranteed student loans	555	534
College loans	8	17
Expected student contribution	540	1,959
Aid from other sources	282	339
Total	3,390	4,636
Excess of expenses over resources	$443	$1,488

SOURCES: AMERICAN ASSOCIATION OF COMMUNITY AND JUNIOR COLLEGES
AMERICAN ASSOCIATION OF STATE COLLEGES AND UNIVERSITIES
NATIONAL ASSOCIATION OF STATE UNIVERSITIES AND LAND-GRANT COLLEGES

WASHINGTON

The average student at a two-year or four-year public college or university who receives student aid could not attend without that support, says a report based on a sample of 2.2 million students.

The preliminary report of a study sponsored by three public-college associations found that—even with federal aid, his or her own earnings, and money from other sources—the average independent student receiving aid still fell $1,488 short of covering education and living costs. The typical "dependent" student, one who received some family support, fell short by $443.

"Almost no students receive aid equal to the total costs of college, even counting their own earnings and any family assistance," said the report.

The study found that about one-third of the students at public colleges who receive federal aid are self-supporting. Because many are married and helping to support their own families, the report said, they have "considerably higher living expenses than dependent students, and also much greater unmet need."

Under regulations used to determine how much aid students can receive, it said, those living on the campus can count the entire cost of their room and board as an expense, but those living off the campus "are allowed only an arbitrary $1,100 'commuter allowance,' far below actual living costs." About half of the federally aided students surveyed had family incomes below the poverty line, now set at $9,200 for a family of four.

When only the dependent students were considered, the average family income was $16,500.

The study was sponsored by the American Association of Community and Junior Colleges, the American Association of State Colleges and Universities, and the National Association of State Universities and Land-Grant Colleges, with financial support from the Exxon Education and Ford Foundations.

—C.M.F.

FULBRIGHT SENIOR SCHOLARS

1983-84 Awards Competition

UNIVERSITY LECTURING AND POSTDOCTORAL RESEARCH

in

- AFRICA
- EAST ASIA and PACIFIC
- MIDDLE EAST and SOUTH ASIA
- LATIN AMERICA and CARIBBEAN
- EAST EUROPE and USSR
- WEST EUROPE

Deadline Extended to September 30, 1982

Information and Applications are available on campuses from the Office of the Graduate Dean at graduate institutions (the Office of International Programs at some institutions) or from the Office of the Chief Academic Officer at 2- and 4-year institutions. Materials are also available from CIES.

COUNCIL FOR INTERNATIONAL EXCHANGE OF SCHOLARS
11 DUPONT CIRCLE • WASHINGTON, DC 20036
(Affiliated with the American Council on Education)

The Fulbright Program is funded and administered by the United States Information Agency.

Athletics

A New Generation of Sports Magazines: Each Focuses on One College's Teams

By N. SCOTT VANCE

The fourth largest newspaper in Kentucky is not a metropolitan daily. It's a tabloid called *Cats' Pause* that devotes its full attention to what happens in the locker rooms and on the playing fields at the University of Kentucky.

A solid benefactor of the University of Alabama sports program, contributing about $10,000 each year to the athletic fund, isn't an alumnus or wealthy fan. He is the publisher of *Bama*, a magazine about the university's athletic programs, and he shares his earnings with the athletic department.

Those publications and others like them are leading a small revolution in the publishing business that keeps fans of college sports happy and helps athletic officials at some major sports universities promote their programs.

At least 25 such publications—all of them started within the past six years—do nothing but report on an individual university's athletic teams.

Nine of the publications are slick, colorful magazines, most of which either make contributions to their universities from their revenues or are owned and operated by university athletic departments.

The rest are tabloid newspapers, most of which are financially and editorially independent of the institutions they cover.

'It's Opportunistic'

The reactions on campuses to the tabloids and magazines are as diverse as the publications and the universities they write about.

"It's opportunistic. We see it as somebody trying to capitalize on Notre Dame," says Roger Valdiserri, director of sports information, about *Go Irish!*, a one-year-old tabloid on the university's football program.

Notre Dame opposes the publication, he

Continued on Following Page

Single-College Sports Publications

The Cats' Pause
Huskers Illustrated
Inside the Auburn TIGERS
BAMA

Institution	Title	Circulation	Format
U. of Alabama	*Bama*	12,500	Magazine
Auburn U.	*Inside the Auburn Tigers*	8,000	Magazine
Arizona State U.	*Sun Devil News*	10,000	Tabloid
U. of Arkansas	*Razorback Sports*	n.a.	Tabloid
Brigham Young U.	*BYU Sports Magazine*	15,000	Magazine
Clemson U.	*Orange and White*	6,000	Tabloid
U. of Florida	*Bullgator*	2,700	Tabloid
U. of Florida	*Gator Bait*	2,200	Tabloid
Florida State U.	*Osceola*	6,000	Tabloid
U. of Georgia	*Georgia Bulldog*	6,000	Magazine
U. of Houston	*Cougars*	5,000	Magazine
U. of Kentucky	*Cats' Pause*	24,300	Tabloid
Louisiana State U.	*Tiger Rag*	10,100	Tabloid
U. of Mississippi	*Ole Miss Spirit*	n.a.	Tabloid
Mississippi State U.	*Dawgsbite*	5,000	Tabloid
U. of Nebraska	*Huskers Illustrated*	n.a.	Magazine
U. of North Carolina at Chapel Hill	*Carolina Blue*	5,200	Tabloid
North Carolina State U.	*Wolfpacker*	n.a.	Tabloid
U. of Notre Dame	*Go Irish!*	n.a.	Tabloid
Ohio State U.	*Buckeye Leaves*	15,000	Tabloid
U. of Oklahoma	*Sooners Illustrated*	n.a.	Magazine
U. of South Carolina	*Spurs and Feathers*	12,400	Tabloid
U. of Tennessee	*Smokey's Tale*	n.a.	Tabloid
U. of Texas at Austin	*Longhorn Sports*	5,000	Magazine
Texas A&M U.	*Inside Aggie Sports*	4,000	Magazine

n.a.—not available

Title IX Applies to College Sports, Appeals Court Says

PHILADELPHIA

The U.S. Court of Appeals for the Third Circuit held last week that Title IX, a law barring sex bias in education, applies to Temple University's intercollegiate athletics program even though it gets no direct federal support.

The ruling came in a case filed by eight female student-athletes at the university, who charged that the institution was violating Title IX by discriminating against women in the provision of athletic scholarships, competition, equipment, coaching, and other areas.

The university denied that it discriminated and argued that Title IX did not apply because its athletics department receives no federal funds directly.

In its eight-page ruling, the circuit court relied on a decision that a three-judge panel of the court handed down in August concerning Grove City College, a small Presbyterian institution near Pittsburgh.

In that case the court ruled that an institution is covered by Title IX even if the only federal dollars it receives come through Pell Grants to its students.

It also held that the "all-inclusive terminology" of Title IX applies to "*all* forms of federal aid to education, direct or indirect."

Specific Answer on Athletics

Title IX of the Education Amendments of 1972 says, "No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits or, or be subjected to discrimination under any education program or activity receiving federal financial assistance."

The appeals court noted that Temple had asked the court to answer specifically whether the phrase "education program or activity receiving federal financial assistance" includes such things as intercollegiate athletics that receive no direct U.S. aid but that benefit from aid received by students or other parts of the university.

The circuit court said simply, "We answer this question in the affirmative."

The circuit court's ruling upheld a decision by the U.S. District Court for the Eastern District of Pennsylvania.

The lower court ruled last October that Title IX applied to Temple's athletics program because not only does the university receive about 10 per cent of its total annual operating budget from federal funds, but that:

"Affidavits and depositions indicate that the university's athletic department is the beneficiary of somewhat more direct federal assistance: work-study money pays the salaries of a sizable number of employees in the athletic department; many athletes receive federal grants and loans; and the intercollegiate athletic program makes use of a number of federally financed buildings." —CHERYL M. FIELDS

Sidelines

John Hawkins, a cheerleader at the University of Mississippi, broke an old tradition this month.

At the season's first Ole Miss pep rally, male cheerleaders have traditionally raced onto the field waving the Confederate battle flag while the band played "Dixie." But Mr. Hawkins, a junior who was elected to his post by a student vote last spring, refused to carry the flag. "In the same way whites have been taught to wave it with pride, I have been taught not to wave it for what it represents," he said.

Mr. Hawkins, who is black, suggested that a new flag be designed that would "cater to the interests of blacks, too."

University officials didn't seem upset by the affair, but some alumni were reported not to be pleased by the idea of changing the flag. Said an Ole Miss spokesman: "The only people profiting from this will be the vendors who sell flags. This is the silliest thing."

•

Speaking of cheerleaders, two universities in Omaha have forbidden them to perform four-high pyramids because administrators at the two institutions are worried about injuries. Creighton University and the University of Nebraska at Omaha barred the stunt following reports that a cheerleader at Syracuse University had suffered a fractured skull in a fall from a pyramid.

•

Politics and sports make a volatile mixture. That is the lesson learned by Monroe W. Yonce, a local officer of the Gamecock Club, the 11,100-member sports-booster group at the University of South Carolina. Last March, Mr. Yonce wrote several of his state lawmakers, urging them to re-elect an incumbent trustee of the university.

But, alas, Mr. Yonce's man lost. The winner of the seat, Michael J. Mungo, a former trustee who had lost his seat four years earlier to his now-vanquished foe, was not pleased by Mr. Yonce's letterwriting campaign. He noted that the Gamecock Club could lose its tax-exempt status by engaging in politics. "The clubs have been told that it's inappropriate to be involved in political activities," he said.

Mr. Yonce calls the flap "the most ridiculous thing I ever heard of" and denies that he wrote the letters on Gamecock Club stationery. "I don't even own any stationery. I was just writing my Congressmen like anybody else. This thing has gotten so blown out of proportion. I just can't believe it."

•

At Indiana University–Purdue University at Indianapolis, they're charging people $25 to jog. For the fee, Indianapolis residents may, between now and Nov. 8, jog on the university's new outdoor track and use locker rooms during specified hours.

Joggers can save some money if they jog to the jogging sessions. Parking permits cost extra.

Magazines

Continued from Preceding Page

says, "because we don't want athletics to override the rest of the university."

Mr. Valdiserri says his university threatened *Go Irish!* with a lawsuit when the tabloid's advertisements touted it as the "official" magazine of the university's sports program, a claim the publisher no longer makes. Reporters for *Go Irish!* will not be allowed in the press box this fall, he says.

At the other end of the spectrum, Leon Cross, assistant athletic director at the University of Oklahoma, praises *Sooners Illustrated*, a four-year-old magazine covering Oklahoma sports. "It's been a great help to us. It gives us exposure, helps us communicate with our supporters, . . . and is a great help in our recruiting program."

The nine magazines, most of which cover all sports but focus on football, are the newest arrivals to the fledgling industry. Publishers of five magazines, unlike owners of most sports tabloids, have agreements with their respective universities to give a fixed share of their proceeds to the athletic departments. One magazine, at the University of Georgia, is owned and operated by the athletics department itself. Another makes occasional contributions to its university and the other two share none of their income.

No Investigative Reporting

Magazine publishers and their staffs work more closely with the universities than do the staffs of the tabloids.

"We're not out to do any investigative reporting," says Kirk McNair, who publishes both *Bama* and *Inside the Auburn Tigers*, a magazine about Auburn University. "We operate on the premise that supporters want to hear good things about the school. Of course, the winning seasons have made that job fairly easy."

For providing *Bama* with "access" to its sports program, Mr. McNair says, Alabama's athletic program reaps about $10,000 a year in royalties. The magazine, which sells subscriptions for $25 a year, has a circulation of about 12,500. Other magazine publishers give the universities from 12 per cent to 20 per cent of their sales.

While that money is helpful, according to Sam Daily, Alabama's assistant director of athletics, the extensive news coverage of Alabama's teams in the magazine is a more important benefit to the university.

Bama, which offers more information about more Alabama sports than newspapers do, he says, helps fans "feel more a part of what's going on."

The magazines also get endorsements, and sometimes assistance, from big-name coaches.

"Pat Dye [the football coach at Auburn University] asked us" to publish the magazine, says Mark Murphy, editor of *Inside the Auburn Tigers*. And George Berguson, owner of *Inside Aggie Sports*, says the new football coach at Texas A&M, Jackie Sherrill, is helping him improve his magazine.

"I read every issue from cover to cover," says Mr. Sherrill in an advertisement for the magazine, "and I urge every Aggie fan to do the same."

The tabloid newspapers maintain more editorial independence and, as a consequence, often have less congenial relationships with their respective universities than the magazines do.

Oscar L. Combs, often referred to as the granddaddy of the tabloid business, started *Cats' Pause*, generally acknowledged to be the first such newspaper, in 1976. When his paper was first to reveal the behind-the-scenes maneuvering of Gov. John Y. Brown to replace the university's football coach with George Allen, former coach of the Washington Redskins, the paper's reporters "were pretty much barred from football that season," Mr. Combs says.

"I won't dig [for controversial stories] for the sake of digging," Mr. Combs says, "but if I run across a story that will cost a coach his job, I'll print it. We won't whitewash anything."

That independence has forced the university to treat his publication more seriously than it has in the past, he says. With a circulation of 24,300, the tabloid reaches more Kentucky sports fans and contributors than daily newspapers in the state with circulations three times larger, Mr. Combs says.

Charles Sweeney, owner of *Go Irish!*, says he will continue publishing despite Notre Dame's open hostility toward his tabloid. When asked about Mr. Valdiserri's concern that athletics not "override" the academic side of the school, Mr. Sweeney responds, "Did you mention to him [Mr. Valdiserri] that it might be a little late for that?"

Notre Dame's position, Mr. Sweeney says, is "certainly an obstacle, but every obstacle can be surmounted." He'll continue the publication because "there is a need for it" and "because it's fun." *Go Irish!* advertisements promise that "a percentage of all subscription proceeds" will be donated to the university's athletic endowment fund.

Despite hostility at some universities, most athletic officials with teams covered by tabloids or magazines cite numerous benefits.

"When we send [prospective recruits] our magazine, we know it's being compared to everyone else's, and they [the students] can see the differences between programs," says Perry McIntyre, editor of the *Georgia Bulldog*, the only magazine of its type published by an athletic department.

Out-of-State Recruiting

Mr. McIntyre says his magazine, coupled with a weekly newsletter during the football season, is particularly valuable in out-of-state recruiting, since potential players can "see that they will get some out-of-state coverage."

Although it's difficult to document, some university officials also say they feel the publications help increase outside contributions to their athletics program.

Mr. Cross says he has received "quite a few calls" from people who read in *Sooners Illustrated* about a particular athletic program or fund drive and wanted to make a donation.

Adds Mr. McIntyre of the University of Georgia: "When somebody constantly has something in front of them about the program," they are more likely to answer "a call to contribute. They don't feel as removed from the program as the others do. Basically, it's a sell job."

In 1980, Mr. McIntyre says, Georgia converted a 30-year-old newsletter sent to sports boosters into a monthly magazine.

"When you're getting $3-million a year from your supporters, you realize you've got to give some attention to public relations," he says. The magazine costs $25 a year and reaches 6,000 subscribers.

One reason for starting the magazine, he said, was to compete with some 15 new university-sports magazines that appeared during 1979 and 1980. The magazines, only five of which survive in their original form, were owned by Thomas R. LeDuc, who was the first to begin publishing magazines on individual sports programs.

By 1980 Mr. LeDuc had also signed contracts with schools to publish as many as ten more magazines, but he went out of business in 1981. The downfall of Mr. LeDuc's empire has made some universities hesitant to enter into new contracts with magazine publishers, industry sources said.

Despite that inauspicious start, the industry is slowly moving ahead. Mike Henry, publisher of *Huskers Illustrated* (University of Nebraska) and *Sooners Illustrated*, says he hopes to sign contracts this year with two more universities to publish similar magazines on their sports programs.

This summer, 10 magazine and tabloid publishers gathered in Atlanta to establish the National Collegiate Sports Publications Asssociation. Chief on the association's agenda, besides attracting more members, according to its organizer Steve Ellis, will be soliciting national advertising.

Mr. Ellis, who publishes *Osceola*, a tabloid on Florida State University's athletic program, says the publications survive because they inject some excitement into the lives of their readers.

"The average Joe might not be too satisfied with his job or his everyday life. So he adopts a team. And we provide the information for him to do that. He pays his 25 bucks a year and he knows just as much about the sports program as the big-shot contributor."

Scores, Stars, and Stats of the Ivy League

PRINCETON, N.J.

Frustrated by news coverage of Ivy League athletics—and hoping to make some money—a University of Pennsylvania graduate has started a newspaper devoted to Ivy sports.

"It's very difficult for the Ivy graduate to follow Ivy sports," says Fritz Landman, the new publisher. "It's virtually impossible to find ice-hockey or lacrosse scores. Even in football, you're lucky if you find one paragraph buried in the sports section. In general, you're left hanging."

Ivy League fans will be left hanging no longer. This month, the inaugural issue of *Ivy Sports*, a 12-page tabloid to be published 25 times a year, was mailed to nearly 3,000 subscribers. A subscription costs $35 a year.

Ads in Alumni Magazines

Ivy Sports will deliver "the scores, the stars, the stats, and the standings" in each conference sport, proclaims the advertisement placed by Mr. Landman, a former marketing executive and publisher, in alumni magazines of the eight Ivy League institutions.

While Mr. Landman has never before played a formal role on the Ivy League sports scene, he is not a complete newcomer. Besides being an Ivy League graduate, Mr. Landman lives in Princeton, N.J., is married to a Brown University graduate, and has a son playing football at Dartmouth this fall.

The money behind the tabloid is also pure Ivy League.

"I made nine phone calls and got eight people" to help finance the venture, Mr. Landman says. The partners are three Princeton graduates, two Dartmouth graduates, one Brown alumnus, and two alumni of the University of Pennsylvania. The single unsuccessful call for money, Mr. Landman says, was placed to a non-Ivy graduate.

'Pleased to See It'

Response to the new publication among Ivy League sports officials has generally been positive.

"Honestly, I'm pleased to see it," says Charles Harris, director of athletics at the University of Pennsylvania. "Although the Ivy group has a different philosophical approach to athletics than some schools do, we still offer a quality product" that people will enjoy reading about, he said.

Says James Litvack, executive director of the Ivy League Conference: "Increasingly, newspaper coverage is concentrating on a few schools. So any publication that expands people's awareness of our programs is helpful."

Although Mr. Landman says his primary reason for starting the newspaper was to make money, he thinks the paper will be "philanthropic in its effects." Next year, for example, Mr. Landman hopes to sell advertising space to large companies, reserving part of their payments for an Ivy League scholarship fund. If he could sign up 12 corporate sponsors, he says, the fund would be fat enough after five years to support one $5,000 scholarship each year at every Ivy institution.

'Feeling of Fraternity'

Chances for the success of *Ivy Sports* are good, Mr. Landman believes, because of "a particularly close feeling of fraternity" among graduates of Ivy League institutions as well as a concentration of alumni on the East Coast. Other athletic conferences, including the Pacific-10 and Southeastern Athletic conferences, are also the subjects of specialized tabloids.

Explains Mr. Landman: "A guy who graduated from Cornell gets a kick from reading that his next-door neighbor's daughter scored the winning goal for Brown in a soccer game."

—N.S.V.

Rockefeller Foundation

INTERNATIONAL RELATIONS FELLOWSHIPS—1983

The Rockefeller Foundation announces the 1983 Competition for Fellowships in International Relations. Aim of the program is to support men and women whose research and future careers will make significant contributions to the field of international affairs, particularly through improved formulation of foreign policies.

To this end, the Foundation awards some 10 fellowships to enable young scholars and professionals to conduct full-time research outside their own countries for a period not to exceed two years.

A few guidelines:

- *Competition is open to men and women anywhere in the world who have completed their academic or professional training and spent several years at work in the international field.*
- *Applicants are encouraged from the fields of political science and government, economics, history, sociology, law, business, journalism and the sciences.*
- *The program is aimed primarily at young people aged 25-35, but in unusual cases this may be extended to age 40. The Foundation particularly seeks applications from women, members of minorities, people from developing countries and others for whom access to international fellowships has for whatever reason been limited.*

Deadline for submissions of applications is January 15, 1983; the winners will be announced in October 1983. A detailed description of application procedures may be obtained by writing:

The Rockefeller Foundation
International Relations Fellowships
P.O. Box 40899
Washington, D.C. 20016
U.S.A.

C2175-1 9/28/82

CHRONICLE
of Higher Education

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News Summary

Articles on inside pages

Yale University has announced a new policy designed to discourage fraud in research. Story on Page 3.

To improve engineering schools' teaching of manufacturing techniques, the International Business Machines Corporation has announced it will award universities $50-million. Story on Page 2.

Introductory sociology courses typically are "superficial, unscientific, unduly eclectic, [and] moralistic," says one critic. Story on Page 6.

About 1 million students will receive increased aid as a result of the final passage by Congress of a supplemental appropriations bill. Story on Page 7.

The dean of the University of Illinois College of Agriculture, Orville G. Bentley, has been nominated for the top science-and-education post in the Department of Agriculture. Story on Page 7.

Colleges and universities would lose their exemption from federal regulations governing the disposal of hazardous wastes under a bill passed by the House of Representatives. Story on Page 7.

More than half of the colleges and universities with big-time football programs who responded to a survey reported that their athletic programs paid their own way in 1980-81. Story on Page 9.

Virginia has submitted a revised plan for desegregating its public colleges and universities, and Louisiana has sidestepped an obstacle to its plan. Story on Page 8.

Enrollment in Polish universities is down, and some observers link this to the recent arrests of demonstrators at rallies in support of Solidarity, the independent trade union. Story on Page 17.

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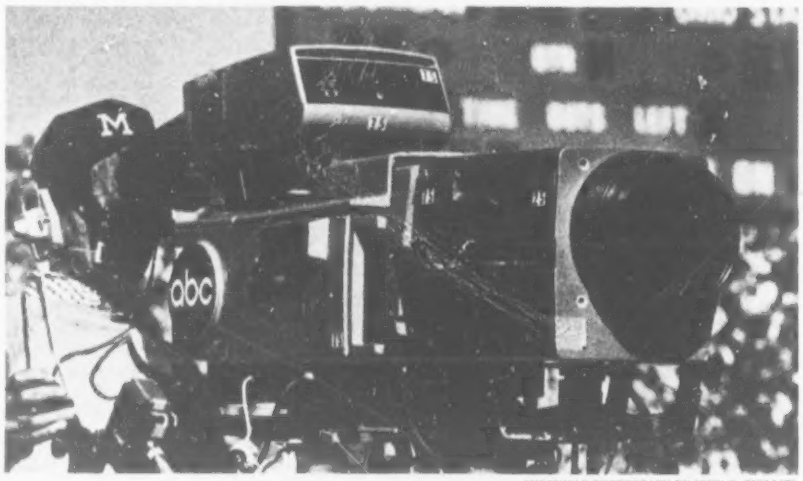
Judge Rules NCAA Television Pacts Violate Antitrust Law, Says Colleges Own TV Rights



CHRONICLE PHOTOGRAPH BY JOHN C. PHILLIPS

"It is unthinkable . . . to allow N.C.A.A. any further profit from its anticompetitive activities," said U.S. District Judge Juan Burciaga in striking down the association's $281-million television contracts.

Calls the association 'a classic cartel'

By N. SCOTT VANCE

A federal judge has cast a cloud of uncertainty over the future of televised college football, striking down the National Collegiate Athletic Association's three television contracts as violations of antitrust law.

The N.C.A.A. promptly sought a stay of the order, which it is certain to appeal. The three television networks concerned proceeded with plans to televise last weekend's games.

Excerpts from the judge's opinion in the case challenging the N.C.A.A.'s control over football telecasts begin on Page 10.

The decision was a victory for the Universities of Georgia and Oklahoma, which had sued the N.C.A.A. for the right to make their own television arrangements.

In striking down the $281-million television contracts, U.S. District Judge Juan Burciaga called the N.C.A.A. a "classic cartel," wielding "an almost absolute control over the supply of college football."

"The right to telecast college football games," Judge Burciaga said, "is the property of the institutions participating in the games, and can be sold or assigned by those institutions to any entity at their discretion."

He also denied the N.C.A.A.'s claim that it had no monopoly over televising college football because it was a voluntary association.

If institutions choose to join the N.C.A.A., the association argued, they are agreeing to submit to N.C.A.A. television controls.

While N.C.A.A. membership is theoretically voluntary, the judge said, "it is clear . . . that an institution which withdraws or is expelled from the N.C.A.A. could no

Continued on Page 10, Column 1

Hospital at American U. of Beirut: 'Lifeline' for City Under Siege

By PAUL DESRUISSEAUX

BEIRUT, LEBANON

A handsome date book, bound in leather, with colored ribbons to help mark the passage of time and engraved plates to separate the seasons, sits at the center of the well-ordered desk of Sameer I. Shehadi, chief of surgery at the American University Hospital in Beirut. Its entries, in a fine Arabic hand, record appointments to be kept, surgery to be performed, operations to be supervised. There are never very many on any given day—"Most of my work is administrative," the physician says, "and I'm usually here to meet with people as needed." But a look back over the pages of the recent past reveals that there were days, then weeks, and finally months when there were no entries at all. Except for a carefully crossed x on this day or that, the pages are blank.

Days of Bombing

The x's, Dr. Shehadi explains, mark the days when Israeli bombs were dropped in the vicinity of the hospital, which is located in the war-torn western section of Beirut. The empty pages represent the three months of Israel's invasion of Lebanon and siege of Beirut, during which Dr. Shehadi and his colleagues were far too busy to make or keep appointments or conduct business as usual. For while the university hospital was never bombed, it was continually assaulted by wave upon wave of wounded humanity, all in need of emergency medical attention, and all receiving it.

"We were treating everybody who came in," Dr. Shehadi says. "We didn't know if they were civilians or fighting men; we didn't have time to find out, and we really didn't care. We never turned down a single patient, and there were times when we had a large number of casualties admitted in a very short span of time. I remember one day when there was a big explosion at a

Continued on Page 18, Column 1

PHOTOGRAPH FOR THE CHRONICLE
COPYRIGHT © 1982 SIPA PRESS/ARAL, BLACK STAR

Sameer I. Shehadi: "We never turned down a single patient. . . . It was often completely chaotic, but we managed."

Kuhn: 20 Years of 'Revolutions'

Thomas Kuhn's *The Structure of Scientific Revolutions*, first published 20 years ago, is a book of large and controversial insights about the practice of science—insights whose influence has been felt in virtually every academic discipline. The book is remarkable for the number of scholars who have written about it, fought over it, or borrowed from it.

An article about Thomas Kuhn begins on Page 21.

BEST AVAILABLE COPY

Television Rights

Continued from Page 1

longer operate a fully rounded intercollegiate athletic program."

Judge Burciaga said he would not delay canceling the N.C.A.A. contracts, even though he acknowledged that many institutions had spent money and made budgetary decisions in anticipation of making TV appearances under the contract.

"It is unthinkable, in the view of the court, to allow N.C.A.A. any further profit from its anticompetitive activities."

If the judge's ruling is sustained on appeal, the system for determining which college football games are to be televised and how much the institutions will be paid is certain to be altered. How big a change will be necessary is already a topic of much speculation among lawyers and college administrators.

Some saw the decision as devastating to colleges as well as to the N.C.A.A.

Others, noting that the court said institutions could assign the rights to televise their football games as long as they acted voluntarily, said the long-range effect of the ruling could be slight.

Many speculated that, if the ruling stands, athletic conferences will negotiate individual television contracts for their members.

No Comment from Networks

Spokesmen for ABC-TV, CBS-TV, and the Turner Broadcasting System would not comment on the ruling or on the networks' plans for televising college football. They said that, for the time being, they would continue with plans to televise several games each Saturday.

The ruling was the latest step in a two-year fight within the N.C.A.A. over who should control the revenues from televising college football—the N.C.A.A. itself or universities with powerful football programs.

Since 1952, the N.C.A.A. has negotiated football broadcasting contracts with television networks and has limited the number of times an institution, even a powerhouse, could appear on the screen. Without those limits, the association argued, relatively few less powerful teams would ever make television appearances.

The N.C.A.A. has fiercely defended its control over football television.

When the College Football Association—a group of 61 major football powers—last year negotiated its own, rival TV contract for football, C.F.A. members said they had been threatened with sanctions by the N.C.A.A. The contract was defeated by a vote of C.F.A. members.

And at the N.C.A.A.'s national convention in January, the membership voted overwhelmingly to affirm the N.C.A.A.'s right to control the televising of member institutions' football teams.

The N.C.A.A. won one court challenge to its television arrangements last month in a lawsuit brought by the University of Texas at Austin. The university had sued the N.C.A.A. in a Texas state court but on different legal grounds from the those in the Georgia-Oklahoma suit.

There was wide disagreement on exactly what the ruling means and who will benefit from it.

"It'll be chaos," said David Cawood, a spokesman for the N.C.A.A. Many institutions have counted on television appearances under the contract, or on receiving a share of the revenues when other members of their athletic conferences appear, he said.

"That loss of anticipated income could require some institutions to discontinue their football programs and could severely hurt their other athletic programs," he said.

If upheld, he said, the ruling could well start a long process of deterioration of college football, which, he warned, could result in "about 15 teams' dominating televised football."

Mr. Cawood said the ruling would take the teeth out of the N.C.A.A.'s rules-enforcement program, since in the past the biggest penalty it could assess for recruiting or other abuses was to keep an institution off television.

The ruling would not seriously hurt the N.C.A.A. financially, he said. About 7 per cent of the N.C.A.A.'s annual operating budget next year will come from television revenues, with most of that derived from televising basketball championships, the control of which was not at issue.

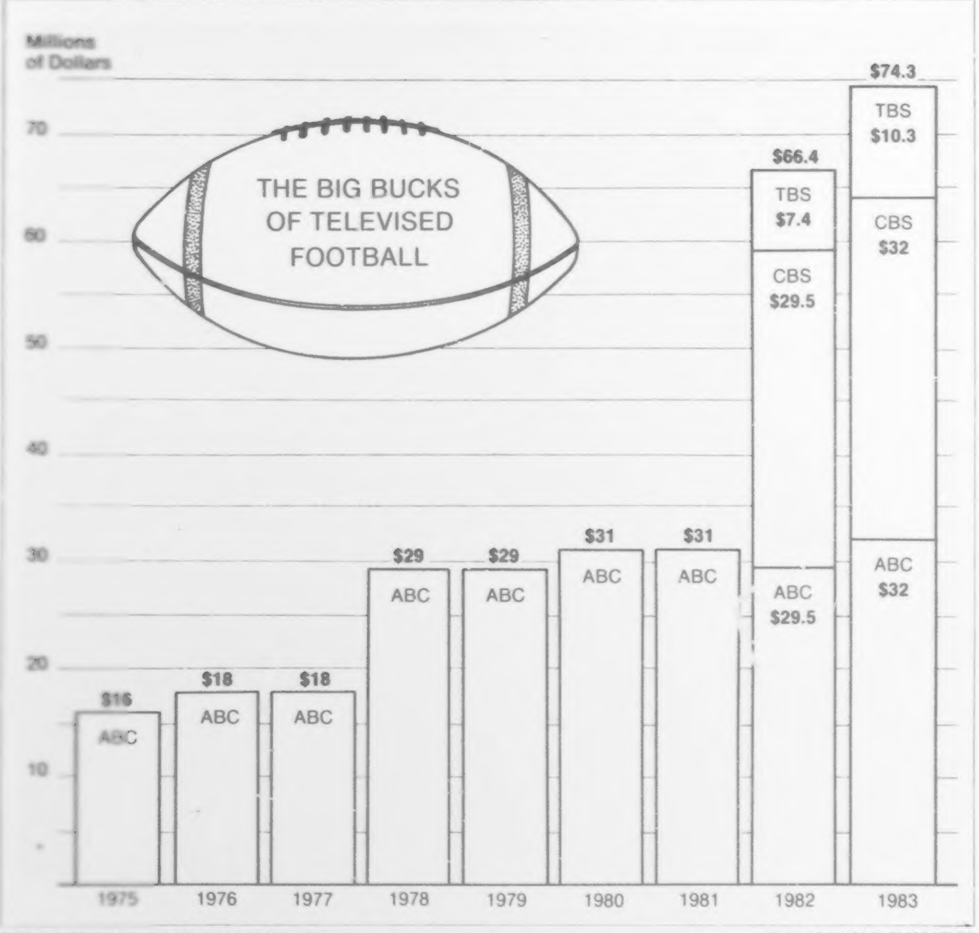
"We're very pleased that the court recognizes the fundamental importance of each institution's property rights," said J. R. Morris, Oklahoma's acting president. "I don't know precisely what ought to happen now," he said. He suggested that some new procedure for regulating college football would have to be developed to give institutions more control over televising their teams.

Charles M. Neinas, executive director of the C.F.A., called the ruling "a complete vindication" of what his organization has been fighting for. He emphasized that the C.F.A. favored some form of control over televising football, but one that gave institutions more control.

Others, however, including some C.F.A. members, said that if the decision stands college football would suffer irreparably.

"The decision means the rich get richer and the poor can go to hell," said Donald Combs, athletic director at Eastern Kentucky University, a member of the N.C.A.A.'s Division I-AA, the "second class" of football teams.

Albert Witte, board member of the C.F.A. and the University of Arkansas's faculty representative to the N.C.A.A., also decried the ruling. "We're not happy about the result of this. There would be very few institutions that will prosper" if the decision stands and universities or conferences are turned loose to negotiate their own contracts, he said.



SOURCE: NATIONAL COLLEGIATE ATHLETIC ASSOCIATION

CHRONICLE CHART BY TYLER YOUNG

The size of the National Collegiate Athletic Association's TV contracts has grown dramatically, largely because two networks, CBS and Turner Broadcasting, were added this year.

Excerpts from Ruling on Television Rights for College Football Games

OKLAHOMA CITY

Following are excerpts from U.S. District Judge Juan C. Burciaga's opinion in the case of the Board of Regents of the University of Oklahoma and the University of Georgia Athletic Association v. National Collegiate Athletic Association.

It can be said with certainty that the prices which have been paid in the past to participating schools for the right to televise any particular game do not even resemble the prices which would have been paid were it not for the N.C.A.A. controls. It is quite obvious that were it not for the N.C.A.A. controls, no network decisionmaker would even consider offering the same price to the schools involved in last fall's Oklahoma-U.S.C. and Citadel-Appalachian State games. Even the defendant's witnesses had to agree that a free market mechanism most certainly would not have resulted in the uniform price paid for each and every game broadcast under past N.C.A.A. contracts with the networks. The evidence is clear that N.C.A.A. controlled the price to be paid to participating teams, and made it impossible for the teams to negotiate any higher price by restricting dealings to a single network.

The evidence is also clear that some teams would have received larger fees were they allowed to negotiate with any and all potential broadcasters. At the same time, the testimony made clear that many of the smaller schools would not have received as much as they did under the N.C.A.A. plans if they were forced to compete in a free market.

While the N.C.A.A. protests that these features have been eliminated by the new dual-network contracts, it is clear that they have not. As discussed above, a maximum of one game each week may allow the participating schools to engage the networks in true negotiations. However, after the network having the right of first choice on any given date has made its agreement with the teams playing the most attractive game of the week, the other schools are left in the same position as they were under previous contracts. They will be selling in a market where there is only one eligible buyer. They will be unable to use the bargaining leverage which would be available if they could sell the rights to the game to other broadcasters. Further, this monopsony situation is aggravated by the limitations on the number of times a school can appear on a given network over a two-year period. Suppose Georgia appears on ABC three times during one year, two national broadcasts and one regional. Under the current contracts and the "ground rules" accompanying them, during the following year Georgia could only appear, if at all, on CBS. This is because Georgia is limited to six appearances over a two-year period, and these six are to be equally divided between the networks. During the second year, ABC would not be allowed to televise a Georgia game. Georgia would then be forced to appear only on CBS. Georgia would have no bargaining leverage to negotiate a larger-than-average rights fee, since it could not threaten CBS with selling the rights to ABC. Thus, while the new contracts may appear, at first blush, to alleviate these features of past N.C.A.A. contracts, in fact they do not. The setting of a minimum aggregate fee, in combination with the "ground rules" restricting competition between the networks and the limitations on each team's appearances, only perpetuate the monopsony situation which N.C.A.A. has created.

* * *

The plaintiff also urges that N.C.A.A. has acted to place a horizontal limit on production. That is, by making agreements with the networks for exclusive national television rights and placing severe restrictions on local broadcasts of college football, N.C.A.A. has agreed to limit production of televised college football. It is clear from the evidence that were it not for the N.C.A.A. controls, many more college football games would be televised. This is particularly true at the local level. Because of N.C.A.A. controls, local stations are often unable to televise games which they would like to, even when the games are not being televised at the network level. The circumstances which would allow so-called exception telecasts arise infrequently for many schools, and the evidence is clear that local broadcasts of college football would occur far more frequently were it not for the N.C.A.A. controls.

This is not a surprising result. Indeed, this horizontal agreement to limit the availability of games to potential broadcasters is the very essence of N.C.A.A.'s agreements with the networks. The evidence establishes the fact that the networks are actually paying the large fees because the N.C.A.A. agrees to limit production. If the N.C.A.A. would not agree to limit production, the networks would not pay so large a fee. Because N.C.A.A. limits production, the networks need not fear that their broadcasts will have to compete head-to-head with other college football telecasts, either on the other networks or on various local stations. Therefore, the Court concludes that the membership of N.C.A.A. has agreed to limit production to a level far below that which would occur in a free market situation.

The evidence is also clear that the N.C.A.A. plan has many of the characteristics of a group boycott. There are two different ways in which

Continued on Page 12, Column 1

Sidelines

A long tradition of leadership is being renewed at Brigham Young University this fall. The starting quarterback on the football team is Steve Young, a great-great-great-great-grandson of the man who led the Mormons to Utah and for whom the university is named.

■

Another old tradition was broken this fall when the University of Minnesota's Golden Gophers moved their home football games to the new Hubert H. Humphrey Metrodome in Minneapolis, thus becoming the only Big 10 team to play all its home games indoors.

The move from the university's Memorial Stadium—known as the Old Brickhouse—after nearly 60 years of Saturday-afternoon football there means the end of games played in the often-Arctic cold or snow of late fall in Minnesota.

While some fans have bemoaned the loss of yet another collegiate tradition, university officials noted that this year's opening game drew more than 56,000 people, 16,000 more than last year's opener.

Further, the move will enable the Gophers to play several games at night, and season-ticket sales are running some 40 per cent higher than a year ago.

■

Ferdinand Marcos, President of the Philippines, is an avid sportsman. When he became President, it is said, he retained the portfolio of Minister of Sport because of his own great interest. He also retained Thomas Rosandich, now president of the U.S. Sports Academy, to advise him on sports matters. This week, during his visit to the United States, Mr. Marcos will visit the Sports Academy in Mobile, Ala., where he will receive an honorary degree, Doctor of Sports Science.

■

What is sport? In case you've wondered, Norman K. Denzin, a sociologist at the University of Illinois, offered this definition in a paper presented to a session on the sociology of sport at this year's meeting of the American Sociological Association:

"Sport is . . . but one instance of a learned, coached, emergent, yet articulated sequence of conduct that intertwines more than one body and mind through time and space within a rule-governed arena of meaningful experience."

■

Two additional drugs have been banned by the International Olympic Committee. The committee maintains a list of more than 50 prohibited "foreign substances" and "physiological substances" designed to artificially increase performance by athletes. Just added to the list: caffeine and the male hormone testosterone.

Irving Dardik, chairman of the U.S. Olympic Committee's sports-medicine council, said an unpublished survey conducted after the 1980 games in Moscow indicated that a majority of the athletes tested had used one substance or the other.

Athletics

NCAA Members Increase Athletic Budgets by 75 Pct. in 4 Years, Study Finds

MISSION, KAN.

Despite big increases in costs over the past four years, more than half the colleges and universities with big-time football teams have athletic programs that pay their own way, according to the National Collegiate Athletic Association.

Deficits are increasing, however, at institutions with smaller athletic programs, the N.C.A.A. reported.

A new financial analysis of intercollegiate athletics conducted for the association indicated that, altogether, the N.C.A.A.'s member institutions spent more than $770,040,000 on their athletic programs in 1980-81, an increase of 75 per cent since a similar study was conducted four years earlier.

At the same time, N.C.A.A. members took in an estimated $717,849,000 in revenues, a 92-per-cent increase in four years.

Mitchell A. Raiborn, a professor of accounting at Bradley University who conducted the study for the association, noted that institutions in the N.C.A.A.'s Division I—universities with the top sports teams—accounted for the lion's share of both revenues and expenses. They spent a total of $606,441,000, while their revenues were $634,117,000.

$2.4-Million 'Profit' Reported

Some 60 per cent of the universities with Division I football teams reported an excess of revenues over expenses. The average of such "profits" was $616,000, Mr. Raiborn said, but 44 per cent of the institutions reported profits of $300,000 or less.

One unidentified institution, however, reported revenues of $2,400,000 more than its expenses.

The average operating deficits of colleges in other classifications in the study showed "significant increases over the four-year period," Mr. Raiborn said. Those other classifications include institutions in the N.C.A.A.'s Divisions II and III and Division I institutions with small football programs or none at all.

Mr. Raiborn noted a continued increase in money from what he called "unearned-revenue" sources—student assessments, contributions, and the government. In his 1977 study, those sources accounted for 14 per cent of the revenues from athletics at big-time-football institutions. This year, even with a 92-per-cent increase in income, their share rose to 17 per cent of total revenues.

Average Revenues and Expenses of Intercollegiate Athletic Programs, 1980-81

Type of institution	Men's programs		Women's programs	
	Revenue	Expenses	Revenue	Expenses
Division I in football	$3,391,000	$3,243,000	$124,000	$392,000
Division II in football	248,000	392,000	19,000	101,000
Division III in football	56,000	249,000	7,000	48,000
Division I with no football	476,000	631,000	44,000	188,000
Division II with no football	102,000	232,000	27,000	72,000
Division III with no football	30,000	144,000	15,000	37,000

SOURCE: NATIONAL COLLEGIATE ATHLETIC ASSOCIATION

Cost of Women's Programs Cited

Virtually all of the Division I universities with major football teams reported that increased expenses were "having a serious impact on athletics and methods are needed to control those expenses."

The expansion of women's athletic programs was cited by the universities as the most significant factor in increased expenses.

The cost of the women's programs, while still significantly less than the cost of men's programs, increased 143 per cent in four years at Division I football institutions.

Other reasons for increased expenses cited by universities were:

▶ Higher costs for grants-in-aid to athletes.

▶ The addition of new sports.

▶ Higher salaries for coaches and other personnel.

▶ Higher cost of recruiting athletes.

Other findings from Mr. Raiborn's study:

▶ Income from student assessments, contributions, and the government increased as a percentage of total revenue at all institutions except Division III colleges with football teams.

▶ At institutions with no football programs, income from student assessments, contributions, and the government doubled in the past four years.

▶ Expenses that could not be attributed to a specific sport grew from 27 per cent of budgets in 1977 to 35 per cent in 1981.

▶ Grants-in-aid and salaries accounted for from 46 per cent to 57 per cent of total expenses.

▶ Grants-in-aid appear to be declining as a percentage of total costs, but salaries and travel expenses are increasing.

▶ Fewer full grants-in-aid are available; more partial grants are being given by institutions.

Mr. Raiborn sent questionnaires to all 753 member institutions of the N.C.A.A. He received usable responses from 41 per cent of them, roughly in proportion to the six classifications he used.

The N.C.A.A. published the results of similar studies in 1970 and 1978. It now sponsors an analysis of the finances of athletic departments every four years.

The new report, *Revenues and Expenses of Intercollegiate Athletics*, will be sent later this month to the chief executive officers, athletic directors, faculty athletic representatives, and primary women's athletic administrators at N.C.A.A. institutions. Additional copies may be purchased from the N.C.A.A., Mission, Kan. 66201. The price is $3 for members and $6 for nonmembers.

—JOHN A. CROWL

Notes on Sports

U. of Cincinnati Battles NCAA to Retain Top Football Status

An emergency court order has stopped the National Collegiate Athletic Association from demoting the University of Cincinnati's football program from Division I-A, the top category, to Division I-AA. An Ohio judge will hear arguments this week on whether to extend the restraining order pending a trial.

Cincinnati says the N.C.A.A. council "arbitrarily and capriciously" twisted the association's bylaws to bring about the demotion. The university says the N.C.A.A. was trying to placate the College Football Association, 61 major powers on the gridiron that have been pressuring the N.C.A.A. for a more exclusive top division.

Last year the N.C.A.A. voted to tighten the eligibility requirements for Division I-A, after the C.F.A. threatened to negotiate its own TV contract. Those new requirements have reduced the number of Division I-A members from 137 last year to 97 this year—or to 96 if Cincinnati loses its bid to keep I-A status. The university told the court that dropping to I-AA would reduce its chances of appearing on television and make it difficult to recruit top athletes and solicit donations.

Rogers Sets Up Endowment at U. of South Carolina

George Rogers, who won the 1980 Heisman Trophy while at the University of South Carolina, has set up a six-figure endowment for scholarships at his alma mater.

The endowment, the amount of which was not disclosed, will provide $1,000 scholarships based on financial need and potential for academic achievement.

Hans Knoop, a university spokesman, said Mr. Rogers had approached the university about setting up the endowment a year ago, well before he admitted this past July that he was a former cocaine user.

"It should be pointed out that setting up the endowment is not the result of that controversy," Mr. Knoop said.

Mr. Rogers is a running back for the New Orleans Saints.

He was the National Football League's

Continued on Page 16, Column 2

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Excerpts

Continued from Page 10

N.C.A.A.'s cartel-like behavior works as a group boycott. First, by granting exclusive rights to certain networks for televising college football, the N.C.A.A. essentially agrees not to bargain or make its product available to other broadcasters. If an N.C.A.A. school were to make an agreement with a broadcaster which did not comport with the N.C.A.A. plan, very severe penalties could be inflicted on the offending school under N.C.A.A.'s rules. Thus, the schools do not stray from N.C.A.A. plan, as can be seen from the events which transpired when C.F.A. attempted to negotiate its own contract with NBC. The veiled threats which came from N.C.A.A. officials and N.C.A.A.'s entire course of conduct constituted classic cartel behavior.

This leads directly to the second aspect of the group boycott allegation. If a member school were to defy the N.C.A.A. and make its product available to all potential buyers on an equal basis, that school would itself be made subject to a group boycott. This aspect of the group boycott operates in the following way. Unlike many industries, college football requires the cooperation of two producers in order to create their product. That is, two schools must stage a game; one school could not stage a football game by itself, at least not a game which would attract the kind of attention which N.C.A.A. football now attracts. If a member school strayed from the N.C.A.A. plan, it would be subject to very severe sanctions from the N.C.A.A. Among the sanctions available would be expulsion from N.C.A.A. Since N.C.A.A. members are prohibited from playing televised football games with non-N.C.A.A. members, the expelled school would be unable to produce its product. Such a situation would clearly constitute an agreement among N.C.A.A. members to boycott the school which strays from the N.C.A.A. Football Television Plan.

The N.C.A.A. offers several justifications for its policies. The principal argument relied upon by the N.C.A.A. is that it is attempting to protect the gate attendance of member institutions. The evidence does not support that contention.

* * *

It is also suggested by N.C.A.A. that the controls help preserve a competitive balance among the football programs of the various schools. Again, the argument must fail. N.C.A.A. has failed to show why this competitive balance cannot be maintained without N.C.A.A. acting as the exclusive bargaining agent for its members in matters of football television. Several witnesses testified to a vague belief that the entire program of controls is necessary, but not one witness could give a credible, factually-supported explanation as to why that is so. Even the executive officers of the N.C.A.A. could not explain why it is necessary for N.C.A.A. to act as the exclusive agent. If the N.C.A.A. is seeking to improve the competitive position of smaller schools seeking television revenues, it has done so in a way which inhibits, if not destroys, the effect of free market mechanisms on the price paid to teams appearing on television.

If the N.C.A.A. is seeking to improve competition on the football field, it has chosen a much too far-reaching manner of doing so. The N.C.A.A. regulations on recruitment, the limitations on the number of scholarships each team may award, and the other standards for preserving amateurism found in N.C.A.A. legislation are sufficient to achieve this goal. Rather than relying on the N.C.A.A. to improve their competitive position by restraining competition, the schools can and should compete on their own and improve their position in that way.

* * *

N.C.A.A. urges that the controls were adopted because of a genuine concern among N.C.A.A. members that college football television would reduce gate attendance. Therefore, there was no intent to violate the antitrust laws, and there is still no such intent, according to N.C.A.A. However, the Court is persuaded that N.C.A.A. has been well aware of the vulnerability of its football controls to attack under the anti-trust laws for some time. In 1976, Executive Director Walter Byers admonished a subordinate to not use the word "set" in describing the Television Committee's activities regarding rights fees for individual games. The word "recommended" was substituted. Byers sought to explain his action as an innocent correction of a subordinate's choice of inaccurate language. However, the Court views this incident as as attempt to conceal N.C.A.A.'s power to fix the price of college football games.

* * *

The Court concludes that the N.C.A.A. controls over college football make N.C.A.A. a classic cartel. This cartel has an almost absolute control over the supply of college football which is made available to the networks, to television advertisers, and ultimately to the viewing public. Like all other cartels, N.C.A.A. members have sought and achieved a price for their product which is, in most instances, artificially high. The N.C.A.A. cartel imposes production limits on its members, and maintains mechanisms for punishing cartel members who seek to stray from these production quotas. The cartel has established a uniform price for the products of each of the member producers, with no regard for the differing quality of these products or the consumer demand for these various products.

Like all cartels, N.C.A.A. seeks to regulate the distribution of revenues to the cartel members. The distribution of football television revenues under the N.C.A.A. program in no way resembles the distribution to be expected in a free market. Like all cartels, N.C.A.A., the umbrella under which the cartel has formed, takes for itself a sizable cut of the revenues from the cartelized product.

Finally, the internal wranglings among N.C.A.A. members strongly resemble classic cartel infighting. The many less prominent schools seek to expand their football revenues beyond what they would receive in a noncartelized market. As in all cartels, these artificially high revenues must, at some point, be derived at the expense of more prominent cartel members. The N.C.A.A.'s attempts to placate the prominent producers, such as Georgia and Oklahoma, have failed. These plaintiffs and others whose superior competitive practices have earned them prominence in the sport of college football wish to no longer suffer the economic injury visited upon them by the less prominent members of the cartel.

Most cartels ultimately fall because of a healthy self-interest among the producers whose competitive ability has earned them prominence in the market. The N.C.A.A. football television cartel in no different.

* * *

The Court has no difficulty in concluding that N.C.A.A. has organized a group boycott. Indeed, it is the ultimate group boycott, far more powerful and effective than those in the cases discussed above. There is an absolute refusal to deal with all of the major competitors of ABC, CBS, and TBS. Broadcasters like NBC, the Hughes Sports Network, Metro-Media and TVS cannot buy N.C.A.A. football for network broadcast. Cablecasters such as the ESPN and USA networks cannot buy N.C.A.A. football for cablecast. There are no exceptions. The producers of college football have horizontally agreed that they will refuse to deal with these buyers. The existence of a group boycott could not be more clear.

The existence of a group boycott against horizontal competitors of N.C.A.A. members is also clear. The nonmember of N.C.A.A. which wishes to sell its football games for television is subjected to a boycott. N.C.A.A. members are in a more powerful position than any of the combinations described above. N.C.A.A. members dominate the college football television market. The amount of college football televised outside of the N.C.A.A. contracts with the networks is minimal. N.C.A.A. members will not play televised games against nonmembers. They have the power to withhold from their competitors a key ingredient of the product. There is no doubt that N.C.A.A. has organized a group boycott, enforced the rules of that boycott, and employed threats and coercion to maintain the boycott.

Thus, the existence of a group boycott is clear from the evidence. However, N.C.A.A. asserts that the plaintiffs do not have standing to litigate the issue of whether N.C.A.A. members have organized a boycott against broadcasters and cablecasters other than ABC, CBS, and TBS. Further, N.C.A.A. argues that, as to the N.C.A.A. boycott against nonmember horizontal competitors, there is no case or controversy since both Oklahoma and Georgia are members of N.C.A.A. and are not subjected to the boycott. Both the case or controversy and the standing requirements are met in this case. The plaintiffs are themselves injured by the boycott against the competitors of ABC, CBS, and TBS. If the defendant had not commandeered the plaintiffs' right to sell to whomever they pleased, the plaintiffs would have received greater rights fees. Because of the boycott, they are unable to sell to the highest bidder, and therefore realized less income than they would if the boycott did not exist. This is certainly the sort of antitrust injury which the Sherman Act was meant to prevent, and for which the Clayton Act provides remedies. The plaintiffs have proved the existence of a group boycott, and the Court holds that this

FACT-FILE

How Often College Football Teams Have Been on NCAA Telecasts, Through the 1981 Season

	National	Regional	Total
U. of Alabama	29	15	44
Alcorn St. U.	0	2	2
Appalachian St. U.	0	4	4
U. of Arizona	0	13	13
Arizona St. U.	2	13	15
U. of Arkansas	18	24	42
Arkansas St. U.	0	2	2
Auburn U.	8	13	21
Baylor U.	2	15	17
Boise St. U.	0	1	1
Boston C.	3	9	12
Boston U.	0	2	2
Bowling Green St. U.	0	3	3
Brigham Young U.	2	18	20
Brown U.	0	10	10
U. of California			
Berkeley	7	21	28
Los Angeles	30	19	49
Central Michigan U.	0	7	7
U. of Cincinnati	0	2	2
Citadel Military C.	0	3	3
Clemson U.	0	15	15
Colgate U.	0	4	4
U. of Colorado	4	16	20
Colorado St. U.	0	8	8
Columbia U.	1	1	2
U. of Connecticut	0	1	1
Cornell U.	1	10	11
Dartmouth C.	1	15	16
U. of Dayton	0	1	1
U. of Denver *	0	1	1
Drake U.	0	1	1
Duke U.	6	13	19
E. Carolina U.	0	5	5
E. Kentucky U.	0	1	1
Fisk U.	0	1	1
U. of Florida	7	19	26
Florida A&M U.	0	1	1
Florida St. U.	3	15	18
Fort Valley St. C.	0	1	1
Fresno St. U.	0	1	1
Furman U.	0	2	2
U. of Georgia	9	21	30
Georgia Inst. of Technology	15	12	27
Grambling St. U.	1	7	8
Harvard U.	0	22	22
U. of Hawaii	0	2	2
C. of Holy Cross	2	8	10
U. of Houston	6	10	16
U. of Idaho	0	4	4
Idaho St. U.	0	2	2
U. of Illinois	6	25	31
Indiana U.	0	12	12
Indiana St. U.	0	1	1
U. of Iowa	10	16	26
Iowa St. U.	0	8	8
Jackson St. U.	0	3	3
U. of Kansas	2	13	15
Kansas St. U.	0	5	5
Kent St. U.	0	5	5
U. of Kentucky	1	7	8
Louisiana St. U.	9	20	29
Louisiana Tech. U.	0	1	1
U. of Louisville	0	2	2
U. of Maryland	5	13	18
U. of Massachusetts	0	5	5
McNeese St. U.	0	2	2
Memphis St. U.	0	2	2
U. of Miami	11	12	23
Miami U. (Ohio)	0	3	3
U. of Michigan	27	22	49
Michigan St. U.	17	22	39
U. of Minnesota	9	23	32
U. of Mississippi	6	17	23
Mississippi St. U.	1	4	5
Mississippi Valley St. U.	0	2	2
U. of Missouri	9	22	31
U. of Montana	0	2	2
Morehead St. U.	0	·1	1
Morgan St. U.	1	0	1
Murray St. U.	0	1	1
U. of Nebraska	20	17	37
U. of Nevada			
Las Vegas	0	1	1
Reno	0	1	1
U. of New Mexico	0	10	10
New Mexico St. U.	0	3	3
St. U. of New York			
Buffalo †	0	1	1
U. of North Carolina	2	25	27
North Carolina St. U.	1	17	18
N.E. Louisiana U.	0	1	1
N. Texas St. U.	0	2	2
N. Arizona U.	0	1	1
Northwestern U.	5	14	19
N.W. St. U. of Louisiana	0	1	1
U. of Notre Dame	38	24	62
U. of Ohio	0	5	5
Ohio St. U.	24	27	51
U. of Oklahoma	28	22	50
Oklahoma St. U.	1	6	7
U. of Oregon	3	17	20
Oregon St. U.	2	11	13
Pacific U.	0	1	1
U. of Pennsylvania	1	3	4
Pennsylvania St. U.	19	23	42
U. of Pittsburgh	19	15	34
Princeton U.	1	12	13
Purdue U.	8	25	33
Rice U.	2	11	13
U. of Richmond	0	2	2
Rutgers U.	0	2	2
San Diego St. U.	1	5	6
San Jose St. U.	0	10	10
U. of South Carolina	1	11	12
South Carolina St. U.	0	2	2
U. of S. California	34	19	53
S. Methodist U.	5	20	25
U. of S. Mississippi	0	3	3
U. of S.W. Louisiana	0	2	2
Stanford U.	10	25	35
Syracuse U.	5	19	24
Temple U.	0	1	1
U. of Tennessee Chattanooga	0	2	2
U. of Tennessee Knoxville	8	16	24
Tennessee St. U.	0	2	2
U. of Texas	34	23	57
Texas A&M U.	17	19	36
Texas Christian U.	2	7	9
Texas Southern U.	0	1	1
Texas Tech U.	4	18	22
U. of Toledo	0	3	3
Tulane U.	0	6	6
U. of Tulsa	1	9	10
U.S. Air Force Acad.	4	16	20
U.S. Military Acad.	30	15	45
U.S. Naval Acad.	30	15	45
U. of Utah	1	7	8
Utah St. U.	0	7	7
Vanderbilt U.	1	2	3
Villanova U. ‡	0	3	3
U. of Virginia	0	2	2
Virginia Military Inst.	0	5	5
Va. Polytechnic Inst.	0	7	7
Wake Forest U.	0	7	7
U. of Washington	6	27	33
Washington St. U.	1	15	16
W. Texas St. U.	0	2	2
U. of West Virginia	0	7	7
W. Carolina U.	0	1	1
W. Kentucky U.	0	1	1
W. Michigan U.	0	1	1
Wichita St. U.	0	3	3
C. of William & Mary	0	2	2
U. of Wisconsin	4	20	24
U. of Wyoming	0	14	14
Yale U.	1	19	20

* Dropped football after 1970 season.
† Dropped football after 1960 season.
‡ Dropped football after 1980 season.

SOURCE: NATIONAL COLLEGIATE ATHLETIC ASSOCIATION

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News Summary

Articles on inside pages

More people would prefer drastic reductions in defense spending than in federal aid to higher education, a national opinion survey has found. Story on Page 3.

The firing of Charles Mayo, president of West Chester State College, has fanned a hot political controversy on the campus and in the state legislature. Story on Page 4.

A study of the quality of doctoral programs in mathematics and the physical sciences used 16 measures to rate quality. Story on Page 8 and Fact-File on Pages 9-10.

Agricultural research in the U.S. is hindered by weak, inflexible leadership, says a study to be released by the White House. Story on Page 11.

President Reagan has issued new directives designed to channel more federal assistance to traditionally black colleges and universities. Story on Page 11.

The Defense Department is trying to speed [illegible] release of some scientific [illegible] that Pentagon officials barred from presentation at a conference last month. Story on Page 11.

Budget cuts and changed priorities have created new obstacles to the support of research on postsecondary education by the National Institute of Education. Story on Page 12.

Penalties imposed by the National Collegiate Athletic Association may damage the University of Southern California's academic reputation, officials fear. Story on Page 15.

Scholars are using several approaches to study television's impact on U.S. culture and politics. Story on Page 21.

Economic problems in Mexico may seriously affect government support for higher education. Story on Page 19.

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END OF LONG DECLINE?

SAT Verbal, Math Scores Up for First Time in 19 Years

NEW YORK

For the first time in 19 years, scores on both parts of the Scholastic Aptitude Test rose in 1981-82. Officials of the College Board, which sponsors the tests, expressed cautious optimism that the rise may presage the end of the long decline in scores.

The class of 1982 surpassed last year's seniors by 2 points on the verbal section of the test and by 1 point on the mathematics section, averaging 426 and 466 respectively on scale of 200 to 800.

Last year, when both scores remained unchanged from the previous year, was the first since 1963 in which neither score declined. That year, the verbal score stood at 478 and the mathematics score at 502.

George Hanford, president of the College Board, said it was too early to know whether this year's results indicated merely a slowing of the decline or the reversal of it.

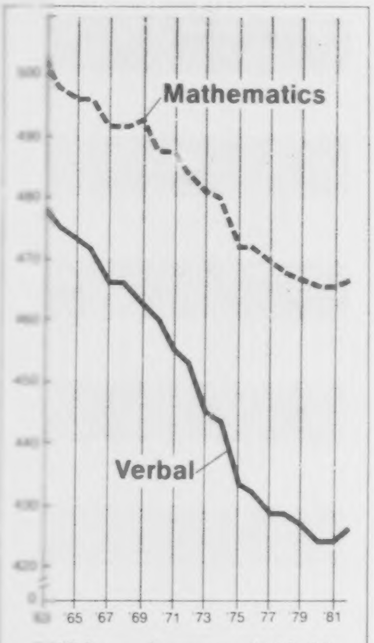
But, he said, "this year's rise, however slight, combined with last year's holding steady, is a welcome sign for educators, parents, and students that serious efforts by the nation's schools and their students to improve the quality of education are taking effect."

Scores on the Test of Standard Written English and on achievement tests in 15 disciplines also rose, the board said. The average achievement-test score rose 5 points to 537, its highest level since 1975.

Part of that increase, however, may be the result of an decline in the number of students taking the achievement tests. Most of those who continue to take those tests do so because they plan to submit the results to colleges and universities with more competitive admissions programs.

Once again, male students received bet-

Continued on Page 6, Column 1



SAT-Score Averages, 1963-82

SOURCE: THE COLLEGE BOARD

At Some Community Colleges, the 'Open Door' Begins to Close

By BEVERLY T. WATKINS

The "open door" is beginning to close at some community colleges as they put more emphasis on academic standards and less on the universal access that has been their tradition since the 1960's.

Some two-year institutions are establishing admission standards for the first time. That is a departure from the prevailing policy of admitting any adult student who may benefit from the college's program, including remedial offerings. The institutions are also tightening academic-program requirements and suspending or dismissing students who continue to fail courses.

State agencies that oversee community colleges are requiring students to take tests in basic skills and imposing stricter criteria for associate-degree programs.

Among recent actions:

▶ Essex County College in New Jersey plans to establish admission standards for the first time in January. The new standards, which are still in the works, will require incoming students to demonstrate mathematics and reading skills at about the eighth-grade level.

The decision to establish standards followed a study of student records that

Continued on Page 8, Column 1

NCAA Gets Stay of Order Ending Its Sway over TV

Appeals court will hear case in November

By N. SCOTT VANCE

After a week of confusion, a federal appeals court has temporarily restored control of televised college football to the National Collegiate Athletic Association. The court will decide this week whether or not to extend its order until it hears the N.C.A.A.'s appeal in the case.

The court's reinstatement of the N.C.A.A.'s TV contracts canceled the first major deal in 30 years directly between universities and a television broadcaster, while relieving fears at some institutions that college football would slip into anarchy and that only a few institutions' football programs would survive.

The week before last, U.S. District Judge Juan C. Burciaga ruled that the N.C.A.A. illegally monopolized televised college football. He struck down $281-million in N.C.A.A. TV contracts and turned institutions loose to make their own arrangements with broadcasters. Judge Burciaga then refused to delay his order, saying that "for too long, [universities] have been denied the opportunity to realize the television income to which they are entitled."

Last week, however, the U.S. Court of Appeals for the Tenth Circuit in Denver issued a stay of Judge Burciaga's order. The judges said they would decide this week whether to extend the stay until the court hears the N.C.A.A.'s appeal, which is expected to begin about November 15.

The Universities of Georgia and Oklahoma brought the lawsuit challenging the N.C.A.A.'s control over televised football, claiming the right to negotiate their own contracts with broadcasters, something the N.C.A.A. has kept them from doing.

Officials at most institutions, even those wanting the N.C.A.A.'s TV controls abol-

Continued on Page 17, Column 1

Some college football games may be moved to Sundays if the National Football League players' strike goes on. Page 15.

UNIVERSITY TRAVEL SERVICE
North American POCKET FLIGHT GUIDE

'Survival' for Travelers; Retirement vs. Tenure

▶ Frequent travelers in academe have strategies that can make the often expensive and confusing business trips more affordable and comfortable.

▶ Federal legislation to "uncap" the mandatory retirement age presents a serious threat to tenure, a committee of the the American Association of University Professors has charged.

For details, see The Chronicle's new "Personal & Professional" section, which begins on Page 27

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West Chester

Continued from Preceding Page

heard it blatantly, out in the open," she said. She also said that those seeking his ouster would not give "a concrete administrative reason in terms of his performance as president."

When it was published, the interview had the effect of bringing out into the open rumors that had circulated quietly on the campus for some time. After that, says Arlene C. Rengert, an associate professor of geography who is also president of the faculty senate, "it was just a regular guessing game as to when the other shoe would fall."

◆

The audits that Secretary Wilburn referred to in his letter to Mr. Mayo are another source of disagreement.

The U.S. Department of Education conducted a review of the college's campus-based student-aid programs in 1981. When the final report was released last spring, it said the college owed the government $76,496.

Of that amount, says Louis F. Weislogel, the college's vice-president for administration and student affairs, $48,417 went to disadvantaged students who, according to the government, had failed to make satisfactory academic progress during the second year of a two-year scholarship program. The college, which applied different standards of progress, believes that the students were not necessarily overpaid, Mr. Weislogel says.

The rest of the $76,496, the Education Department said, was the result of disbursement errors and of the college's failure to keep track of aid recipients' academic status. Mr. Weislogel is quick to point out that no one at West Chester State was accused of using college or federal funds for personal gain. "All the moneys in question were expended for needy students," he said. "We were in error on a number of factors, but we have corrected those factors now."

At the beginning of this month, Pennsylvania's auditor general released an audit of the college that made headlines by charging—as an accompanying press release put it—"top financial officials of West Chester State College with mismanaging more than $561,000 in recent years, including subsidizing a Philadelphia Eagles training camp with state funds."

The auditor general, Al Benedict, an elected Democrat, made a special trip to West Chester State to discuss the report, which covered the fiscal year ending June 30, 1981, in a press conference. He criticized the college for charging the Eagles, a professional football team, too little for the use of parts of the campus for a 1980 training camp. He also criticized a warehouse lease as too expensive and complained that the college should have charged a number of nonacademic programs—such as soccer camps and conferences—more for the use of college facilities.

Mr. Weislogel replied with a press release noting that Mr. Benedict had, at the same time, given the college an "unqualified" audit—which, among accountants, "constitutes the highest rating possible in an audit," Mr. Weislogel said. He attributed most of Mr. Benedict's charges to "a difference of opinion" on the handling of "special funds"—such as those received from conferences and camps—that are not covered by state fiscal guidelines.

Although the audit says the college subsidized the Eagles camp to the tune of $93,574, Mr. Weislogel says that much of what the audit says was spent on the Eagles—for new beds and maintenance of the football fields, for instance—would have been spent anyway. He says the net loss to the college over the three-year life of the Eagles contract, which ended this summer, will be about $12,000.

That is not an unreasonable amount to pay, he adds, for all the publicity that the camp earned West Chester State.

Mr. Weislogel did not become the college's chief financial officer until July, 1980. He has been working hard to correct a number of deficiencies he says he found then in the college's financial-management systems. "We've straightened out the mess," he says.

While he agrees that Mr. Mayo, as president, had final responsibility for the college's budget, he thinks it somewhat unfair that Mr. Mayo's critics are laying all the blame for the problems on him.

The trustees, Mr. Weislogel notes, were kept informed of the college's fiscal situation at all times and knew the details of the Eagles contract. Furthermore, he says, that contract and many of the other problems discussed in the audit—especially in the special-funds office, which had only one employee when Mr. Weislogel arrived—were the responsibility of Mr. Weislogel's predecessor, Dennis D. Bell.

The Thornburgh administration appointed Mr. Bell president of East Stroudsburg State College in 1980.

◆

Administrators and faculty members at West Chester State, including some who supported him, offer mixed reviews of Mr. Mayo's performance as president.

"Probably a lot of people I respect on campus thought it was time Mayo should go, but with dignity," says one administrator. "In the end, the wrong people got rid of him for the wrong reasons."

Another supporter, who also asked not to be identified, calls Mr. Mayo "pathetic" as an administrator and says he neither cared much for the details of administration nor kept abreast of policy questions.

Mr. Mayo's most vocal supporters have been faculty members and students, with whom he developed good relations over the years.

When the Commonwealth Association of Students organized protests against a systemwide tuition hike last winter, Mr. Mayo joined one of the picket lines. "I believe in shared governance, and I've tried to operationalize that belief over the years," says Mr. Mayo. "And I tried to establish a climate where people felt they could speak out."

Mr. Mayo was especially popular among faculty members for resisting pressure from the trustees to develop a retrenchment plan for the college. Such a plan would have been welcomed in Harrisburg.

Both before the firing and after it, Mr. Mayo has been supported by the faculty senate, the student government and the campus chapters of the A.A.U.P., the Association of Pennsylvania State Colleges and University Faculties, the American Federation of State, County, and Municipal Employees, and the Commonwealth Association of Students.

Mr. Mayo was a good deal less popular among the trustees. He had disagreements with trustees over policy questions for years, he admits. Several years ago, a board dominated by Democrats threatened to sue Mr. Mayo because he would not let them interview deans privately.

The current board, however, has never conducted a formal evaluation of Mr. Mayo. Nor have the board and Mr. Mayo had very cordial relations: One trustee, asking not to be identified, says that on one occasion two trustees' cars were ticketed for illegal parking on the campus during a board meeting—allegedly at Mr. Mayo's request.

On another occasion, the trustee says, the athletic director was told by the president's office not to issue a V.I.P. parking pass to a board member attending a football game.

The trustee says Mr. Mayo has "a grating personality" and "all the public-relations sense of Attila the Hun."

Budget Secretary Wilburn, who handled the dismissal for the governor although it was clearly in the province of Secretary of Education Robert G. Scanlon, says of Mr. Mayo: "He has postured himself since the day he took office against the board of trustees, fighting for the faculty and students. He is a confrontational person. I think he thought he was protecting himself, figuring, 'If I do get fired, I can make myself into some kind of folk hero.' "

Mr. Wilburn says Mr. Mayo had been told in June, 1981, of the administration's dissatisfaction with his management of the college's finances. In April, Mr. Wilburn offered Mr. Mayo six months of sabbatical leave and six months of another assignment, plus enrollment in an academic-leadership program at Harvard University and an 8-per-cent pay raise for his final year, if he would resign quietly. Mr. Mayo and his lawyer, however, held out for a 16-per-cent raise, the right to continue using the title "president," and a signed contract rather than a letter of intent. The negotiations eventually flagged.

"I presume he thought we wouldn't fire him in an election year," says Mr. Wilburn, referring to the governor's campaign for re-election—which he seems likely to win.

Of the offer of a settlement for Mr. Mayo, Mrs. Taylor says: "If they had given him any reward for his incompetent running of the college, I'd have screamed bloody murder."

◆

After Mr. Mayo's firing, campus groups—angry that they had not been consulted before he was dismissed—moved quickly to assure that they would have some say in both the appointment of an interim president and the search for a permanent one.

They seem to have succeeded, if only because the man they endorsed, Kenneth L. Perrin, who became acting provost after Mr. Branton resigned, was also the choice of the trustees. Mr. Perrin, who was quickly approved for the interim presidency by the governor, says he was interviewed by four trustees—all of whom voted against Mr. Mayo on August 4.

"This really is a fine college," Mr. Perrin says. "There are so many good people here—students and faculty members. We just don't get enough good press."

SAT Scores Rise

Continued from Page 1

ter scores than females on both the verbal and mathematics sections of the S.A.T. Some 52 per cent of the test-takers were women.

On the verbal section, the average for men was 431 while the average for women was 421. On the mathematics section, males averaged 493 and females 443—a gap that has widened by 6 points in the past 10 years.

Along with the scores, the board released the findings of a questionnaire completed by about 90 per cent of those who took the S.A.T. Among them:

▶ "For the fourth consecutive year, business and commerce was the most popular area of intended college study, with the increase coming predominantly from women." Women, who accounted for slightly more than a third of all students intending to study business in 1973, now account for 56 per cent.

▶ "All students, but especially women, are moving towards high-paying and technological fields of study and away from low-paying fields and the liberal arts."

▶ Interest in studying computer science has increased by 38 per cent in the past year alone—and by 381 per cent since 1975.

▶ Although interest in engineering careers rose for the eighth straight year, only 4 per cent of the women questioned—compared with 23 per cent of the men—listed it as their preferred area of study.

▶ The number of high-school students planning to apply for financial aid increased slightly, to 76 per cent. "Only one in five families is estimated to be able to pay the full annual cost of education at public four-year institutions," according to the board, "and only 11 per cent at private four-year colleges."

About a million students took the S.A.T. in 1981-82—roughly a third of all 1981-82 high-school seniors and nearly two-thirds of all those entering college this fall, the College Board says. The test results are used by many college and university admissions offices, particularly in the East.

The board estimates that if all high-school seniors had taken the test, instead of just those planning to go on to college, the average verbal score would have been 368 and the average math score 402.

Copies of the board's report, *National College-Bound Seniors, 1982*, are available free of charge from The College Board, Box AF, 888 Seventh Avenue, New York 10106.

For the first time, the College Board this year also released a state-by-state breakdown of the S.A.T. scores. Since such information was often either released or leaked to reporters by state education officials in the past, the board decided to issue a list itself "to insure that the information is accurate and to place it into proper context."

Because the proportion of students taking the S.A.T. varies widely among states—from a low of 2 per cent in South Dakota to a high of 69 per cent in Connecticut—scores cannot be used to draw conclusions about the effectiveness of the states' high schools, the board said. --L.B.

Average SAT Scores, by State

	Percentage of high-school graduates taking S.A.T.	Average S.A.T. scores	
		Verbal	Math
Alabama	6%	463	501
Alaska	31%	446	477
Arizona	11%	470	511
Arkansas	4%	480	519
California	36%	425	474
Colorado	16%	468	515
Connecticut	69%	432	464
Delaware	42%	432	465
Florida	39%	426	463
Georgia	51%	394	429
Hawaii	47%	392	465
Idaho	7%	482	513
Illinois	14%	462	515
Indiana	48%	407	453
Iowa	3%	516	572
Kansas	5%	500	545
Kentucky	6%	475	510
Louisiana	5%	470	505
Maine	46%	427	463
Maryland	50%	425	464
Massachusetts	65%	425	463
Michigan	10%	459	514
Minnesota	7%	485	543
Mississippi	3%	479	509
Missouri	10%	465	510
Montana	8%	487	546
Nebraska	5%	493	552
Nevada	18%	436	481
New Hampshire	56%	443	482
New Jersey	64%	416	453
New Mexico	8%	480	517
New York	59%	429	467
North Carolina	47%	396	431
North Dakota	3%	505	563
Ohio	16%	456	502
Oklahoma	5%	483	518
Oregon	40%	435	473
Pennsylvania	50%	424	461
Rhode Island	59%	420	457
South Carolina	48%	378	412
South Dakota	2%	522	553
Tennessee	9%	480	519
Texas	32%	415	453
Utah	4%	494	528
Vermont	54%	433	471
Virginia	52%	426	462
Washington	19%	468	514
West Virginia	7%	462	506
Wisconsin	10%	476	535
Wyoming	5%	484	533

SOURCE: THE COLLEGE BOARD

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Public Would Cut Defense Before Education, Poll Finds

WASHINGTON

People would rather see drastic cuts in federal funds for defense than in support for higher education, a national public-opinion survey has found.

Only 15 per cent of the people surveyed said aid to higher education should be cut drastically, compared to 22 per cent who favored drastic cuts in defense spending.

More than three-fourths of the people surveyed favored continued federal support for low-interest loans to middle-income students, and 70 per cent favored continued federal grants to low-income students, according to a preliminary report of the survey findings.

A substantial majority favored continued federal support of university research in medicine and the natural sciences.

There was less support for aid to the arts, humanities, and social sciences.

Continuation of programs in the arts was opposed by nearly half the people surveyed. Continuing support for research in the humanities and social sciences was opposed by about a third of them.

The survey found that 40.8 per cent of the general adult population tended to agree with those who advocate major reductions in financial aid to students as way of cutting government spending and fighting inflation.

A subtantially larger proportion, 48.5 per cent, tended to agree with critics who fear that the reductions will force some students to drop out of college or shift to a lower-cost institution.

The survey was conducted during the past summer by Group Attitudes Corporation, a research organization in New York City, and was sponsored by 11 national education groups. The survey data were gathered from 1,188 people aged 18 or over in a sample designed to be representative of the adult population. Full results of the survey are scheduled for publication next month.

"The data clearly show that Americans are very concerned about the financing of higher education in their country, and that they would like the federal government to continue its present level of support to needy college and university students," said Walter Lindenmann, president of Group Attitudes Corporation.

The organizations that sponsored the survey are: the American Association of Collegiate Registrars and Admissions Officers, the American Association of State Colleges and Universities, the American Association of University Professors, the American Council on Education, the Association of American Colleges, the Association of Governing Boards of Universities and Colleges, the Council for Advancement and Support of Education, the Council for Financial Aid to Education, the Council of Independent Colleges, the National Association of College and University Business Officers, and the National Association of Independent Colleges and Universities. —J.M

Public attitudes toward cutting federally-financed programs

	Should not be cut at all	Should be cut somewhat	Should be cut drastically
Medical care for the aged	68.0%	19.2%	9.5%
Medical and cancer research	62.0%	27.6%	7.4%
Energy, research and development	43.1%	40.4%	13.4%
Aid to higher education	**42.2%**	**38.3%**	**15.0%**
School lunch program	33.5%	44.0%	18.4%
National-defense spending	32.5%	42.0%	22.3%
Aid to agriculture	28.6%	52.4%	13.9%
Social-welfare programs	22.5%	43.0%	31.6%
Space program	19.9%	46.3%	30.7%

Public attitudes toward continuing federal education programs

	Favor	Oppose	Undecided
Loans to middle-income students	77.4%	10.3%	8.6%
Grants to low-income students	70.6%	18.5%	7.2%
Support for institutions with large percentage of low-income students	66.4%	16.2%	13.7%
Medical research	81.0%	6.1%	9.5%
Research in the physical sciences	64.0%	12.7%	19.2%
Research in the humanities	41.8%	31.2%	23.1%
Research in the social sciences	39.0%	31.9%	25.2%
Programs in the arts	25.9%	46.8%	22.3%

Note: Data are from a stratified sample of 1,188 people aged 18 and over, representative of the U.S. adult population

SOURCE: SURVEY BY GROUP ATTITUDES CORP.

1,000 Institutions to Mark Higher Education Week

WASHINGTON

Special activities recognizing the contributions of higher education to American society are scheduled at more than 1,000 colleges and universities across the country next week.

A convocation at the Jefferson Memorial here will highlight the events of National Higher Education Week, being sponsored by the Council for Advancement and Support of Education as part of its "America's Energy Is Mindpower" campaign. The governors of all 50 states and the mayors of 15 cities have issued proclamations in honor of the week.

The focus of the campaign this year is on cooperation between the campuses and the business community, and participating institutions are planning events around that theme. Some examples:

▶ In San Francisco, a consortium of eight colleges—both public and private—has scheduled speaking programs, campus tours, and receptions designed to inform the public about the role of higher education. The group has produced and distributed a study showing that the eight institutions are among San Francisco's largest employers.

▶ In Washington, Georgetown University will sponsor a Mindpower Symposium, for corporate officers and college and university presidents, on strengthening relations between higher education and business and industry.

▶ In Indiana, Ball State University will sponsor a "College and Industry Dialogue" in cooperation with the National Association of Manufacturers.

The convocation at the Jefferson Memorial on October 9 will honor the winners of CASE's Thomas Jefferson Medal and Professor of the Year award. The Rev. Theodore M. Hesburgh, president of the University of Notre Dame, will receive the Jefferson Medal "for his contributions to society beyond the field of higher education."

Among the 600 invited delegates participating in the convocation will be representatives of the 90 institutions that have awarded honorary degrees to Father Hesburgh. Anthony F. Aveni, a professor of anthropology and astronomy at Colgate University, will be honored as the 1982 Professor of the Year.

Other events of National Higher Education Week include a Mindpower Day at the World's Fair in Knoxville, Tenn., and a lecture at the Smithsonian Institution by Mr. Aveni.

The Mindpower campaign, which was begun in July, 1981, has been featured in $10-million worth of public-service advertising seen by an estimated 100 million Americans.

The campaign has the endorsement of 30 national education associations and 87 state education agencies. —PAUL DESRUISSEAUX

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est annual *Current Population Survey* show that the number of people out of work among those aged 25 to 64 with four or more years of college education rose from 386,000 in 1981 to 570,000 in 1982. Even so, the jobless rate of that group—3 per cent—was lower than that of any category of workers with less education, the bureau reports.

Jobless Offered Free Semester at Sacred Heart College

A free semester of study is being offered by Sacred Heart College in North Carolina to unemployed high-school graduates over age 21.

Students accepting the free-study offer will be limited to two eight-week sessions of night classes. In the first session, all students will be required to take a class in career and life planning and an introductory business course.

Free child-care service will be provided, college officials said.

Judge Orders Release of Student Funds

A state judge has ordered California State University at Los Angeles to release $500,000 in student-activity funds that were frozen by the university when student leaders refused to hold a recall election.

Judge Leon Thompson also appointed a referee to determine the validity of petitions that, the university contended, required the student leaders to hold an election on their recall.

Harvard Alumni Offered Chance to Join 'Ivy League'

The financially strapped Arnold Arboretum, Harvard University's botanical guardens and horticultural-research center in Boston, is offering Harvard alumni the opportunity to buy membership into an elite club called the "Ivy League."

For a gift of $100, alumni will receive a rooted cutting of ivy stripped from one of two university residence halls as part of a $35-million renovation project.

Last spring, Harvard officials decided to remove the ivy, which, officials said, appeared to be damaging the concrete and mortar. The decision brought highly publicized protests from students and some alumni.

Notes

Richard D. Fulton, assistant dean of the graduate school at Washington State University, has been named the first "dean in residence" under a new program of the Council of Graduate Schools in the United States. Mr. Fulton will spend a sabbatical year at the council's Washington office. . . . The University of Wisconsin Board of Regents has instructed Robert O'Neil, the university's president, and Hubert Grover, the state school superintendent, to appoint a committee to draft a list of subjects that high-school students should take in preparing for admission to the university system. . . . The student director of "KU on Wheels," a student-run bus system at the University of Kansas, has been arrested and charged with theft following the discovery that an undetermined amount of money was missing from the system's bus fund.

Correction

Because of a technical error several lines were dropped from the first paragraph of an article in the In Brief section of *The Chronicle*, September 22, concerning charges that the University of California had prevented the broadcast of a radio script. The paragraph should have read:

Grievances have been filed against the University of California by two staff members of a university radio program on grounds that a script on discrimination against women in higher education was kept off the air.

Notes on . . .
Student Aid

A Department of Education study of mistakes made in the Pell Grant program has done more to "promote scandal" and garner headlines than to improve the program, a university researcher has charged.

Douglas M. Windham, professor of educational administration at the State University of New York, contends that problems in the Pell Grant program were overstated by the report, prepared under an Education Department contract by Advanced Technology, Inc.

Released last April, the report said $650-million in erroneous grant payments had been made in 1980-81—including $526-million in overpayments and $124-million in underpayments.

Mr. Windham took issue with the report for counting some payments as erroneous simply if certain papers were missing from students' files.

In addition, Mr. Windham contended, just the use of the word "error" in the report carries implications of fraudulent behavior that are not substantiated, suggesting that the report's authors intended to "create or promote controversy."

In a letter responding to Mr. Windham, Alexander Ratnofsky, director of the study, denied charges that the report was inflammatory or misleading.

If anything, Mr. Ratnofsky said, the report probably underestimated the amount of money awarded in error because his research team deliberately made conservative assumptions "to avoid giving indications of problems when they did not exist."

■

The Justice Department recently uncovered some clearer cases of student-aid fraud, in an investigation of nonresident aliens who illegally received federal benefits.

A grand jury in New Haven, Conn. this month indicted 23 people on charges that they had falsely claimed to be U.S. citizens to obtain federal student loans and grants.

■

High default rates on National Direct Student Loans—the smaller of the two federal student-loan programs—have given all student loans a bad name, says Thomas R. Wolanin, a former staff director of the House Subcommittee on Postsecondary Education. His solution to the problem: Get rid of direct loans.

The default rate on direct loans is 16 per cent, compared with 8 per cent on Guaranteed Student Loans.

The latter are made and collected by commercial banks, which receive a federal interest subsidy. Direct loans are awarded and collected by college officials, using money appropriated by Congress and funds collected from past borrowers.

Mr. Wolanin, who is now special assistant to the president of Antioch University, said at a recent seminar on student loans that he wanted to "get colleges out of the lending business." He suggested that money collected on old loans be used in the Supplemental Educational Opportunity Grant program. He also recommended dropping the interest on guaranteed loans from 9 to 7 per cent.

—JANET HOOK

First Major Study Since 1969 Rates Quality of Graduate Programs

By MALCOLM G. SCULLY

WASHINGTON

Doctoral programs in mathematics and the physical sciences at highly regarded public and private universities have received high marks in a comprehensive study of the quality of graduate education in the United States.

The study also identified a number of less well-recognized institutions where the quality of such graduate programs was perceived to have improved significantly in the last five years.

The results of the assessment of quality in six disciplines—chemistry, computer science, geoscience, mathematics, physics, and statistics and biostatistics—were published here last week by the National Academy Press.

Four additional volumes, which will include the studies of doctoral programs in 26 other disciplines in the humanities, social sciences, biological sciences, and engineering, are to be released by the end of October.

The assessment is the first major investigation of the quality of graduate programs since a study by the American Council on Education in 1969.

It was conducted by a committee named by the Conference Board of Associated Research Councils, which comprises the American Council of Learned Societies, the American Council on Education, the National Research Council, and the Social Science Research Council.

The committee took pains to avoid leaving its study open to the conventional criticism that assessments of the reputations of graduate programs constitute little more than gossip, and it stressed that no one numerical measure "can rank the quality of different programs with precision."

It listed 16 separate measures "related to quality," and refrained from combining them into a single composite ranking.

Those measures included the size of the graduate faculty, the number of graduate students, the level of graduates' success in finding jobs, the percentage of faculty members receiving research support from federal agencies, the extent of library holdings, and the number of publications by professors in the program.

The committee also conducted a "reputational survey," completed by 1,155 faculty members in the six fields in mathematics and the physical sciences. The faculty members were asked to rate:

▶ The scholarly competence and achievements of the faculty members in 50 departments.

▶ The effectiveness of the programs in educating research scholars and scientists.

▶ The improvement of the programs over the past five years.

They were also asked to indicate how familiar they were with faculty members in the programs being rated.

The results were presented in both raw scores and in standardized scores showing how far above or below the mean of 50 each program was ranked.

There were few surprises in the ratings of the quality of the graduate faculties. For the six fields, the institutions with standardized scores of 70 or above were:

Chemistry: University of California at Berkeley, California Institute of Technology, Columbia University, Harvard University, Massachusetts Institute of Technology, and Stanford University.

Computer sciences: Berkeley, Carnegie-Mellon University, M.I.T., and Stanford.

Geoscience: Caltech and M.I.T.

Mathematics: Berkeley, University of Chicago, Harvard, M.I.T., and Princeton University.

Physics: Berkeley, Caltech, Chicago, Cornell, Harvard, M.I.T., Princeton, and Stanford.

Statistics/biostatistics: Berkeley, Chicago, and Stanford.

However, the ratings of programs that had improved in quality over the past five years did identify institutions that have not traditionally received the best marks in reputational surveys. The programs with scores of 70 or above on that measure were:

Chemistry: Colorado State University, Florida State University, University of Nebraska at Lincoln, University of South Carolina, University of Southern California, and University of Utah.

Computer science: Georgia Institute of Technology and University of Rochester.

Geoscience: University of Arizona, Cornell University, University of South Carolina, and Washington University in St. Louis.

Mathematics: University of Delaware, University of Illinois at Chicago Circle, University of Kentucky, University of Texas at Austin, and University of Utah.

Physics: University of California at Santa Barbara, University of Houston, University of New Mexico, North Carolina State University, University of Texas at Austin, and Virginia Polytechnic Institute.

Statistics/biostatistics: Carnegie-Mellon University, University of Pittsburgh, and University of Washington.

The committee's report on its assessments does not provide lists, in descending or ascending order, of the results of the reputational survey, and Lyle V. Jones, co-chairman of the committee, said it had hoped to avoid the establishment of a simple pecking order.

However, in a telephone interview, Mr. Jones, who is director of the psychometric laboratory at the University of North Carolina at Chapel Hill, said the committee members recognized that such lists would be drawn up.

"By providing a number of measures, many of which are related to quality," he said "we're hoping pragmatically that no one measure will be taken as the answer."

He added that the committee had decided against developing a single, composite measure of the quality of graduate programs.

"We are leaving to the reader the awesome task of synthesizing the different measures. We present the data and leave it to the users to interpret them," Mr. Jones said. "We're in enough trouble just publishing the results."

He added that unlike the "raters" who participated in earlier surveys, those in the committee's study were provided with "the names of the faculty members involved with each program to be rated and the number of research doctorates awarded in the last five years."

The report of the committee's findings recognizes that the survey will be subjected to many of the criticisms leveled at earlier studies—that the raters are less familiar with smaller programs, that they probably include a disproportionate number of alumni of larger programs, and that they reveal geographical biases.

The report adds, "Some critics may argue that such ratings are positively misleading because of a variety of methodological artifacts or because they are supplied by 'judges' who often know very little about the programs they are rating.

"The committee has conducted the survey in a way that permits empirical examination of a number of the alleged artifacts and, although our analysis is by no means exhaustive, the general conclusion is that their effects are slight."

The report also defends the reputational survey on the same grounds that some of the earlier surveys have been defended. It notes that graduate students, faculty advisers, and granting agencies make decisions based on impressions of a program's quality.

"The impressions are real and have very real effects, not only on students shopping for graduate schools, but also on other flows, such as job-seeking young faculty and the distribution of research resources," the report says.

While the impressions "may be far from ideally informed," it adds, they "show a strong degree of consensus within each discipline, and it seems safe to assume that they are more than passingly related to what a majority of keen observers might agree program quality is all about."

Copies of the committee's report on its findings, *An Assessment of Research-Doctorate Programs in the United States: Mathematical & Physical Sciences*, are available for $10.50 each from the National Academy Press, 2101 Constitution Avenue, N.W., Washington 20036.

'Open Doors' Begin to Close at Some Community Colleges

Continued from Page 1

showed about 85 per cent of new students had serious academic deficiencies. Since 1980, the college has dismissed more than 450 students for continuing academic failure and put another 400 on probation.

▶ The Passaic County Community College has restricted enrollment in its remedial courses to students who can read at the eighth-grade level or above, and has told other applicants to attend local adult-learning centers until they are ready for college.

Although the restriction is not a formal admission standard, it amounts to one, because New Jersey requires all higher-education institutions to place students who do not achieve minimum proficiency on a basic-skills test in remedial courses until they can do college entry-level work.

▶ In response to the actions at Essex and Passaic, the New Jersey Council of County Colleges, whose members are the presidents of two-year institutions, has just formed a committee to study open access and the underprepared student. The committee will make recommendations to the state board of higher education for revising the state policy that guarantees all high-school graduates admission to a two-year college.

▶ The California Community College system has tightened requirements for the associate degree. Under the new requirements, which will take effect next July 1, students seeking a degree will have to complete 18 units of general education, instead of the present 15, and take courses in writing and analytical thinking. Each of the 107 community colleges must establish standards of proficiency in reading, writing, and mathematics, and students must meet those standards before they can graduate. The grading policy was also revised to restore F for failure and limit W for withdrawal.

▶ The Florida Department of Education is developing a basic-skills test for students seeking an associate degree or admission to the upper division of a four-year institution. Effective August 1, 1984, such students will have to take a test in communications, computation, and reasoning and pass it with a minimum score, which has not yet been determined. The state legislature requested the test, which was developed jointly by faculty members at two-year and four-year colleges.

▶ Miami-Dade Community College has established a program called Standards of Academic Progress that, among other things, enables the college to monitor a student's program through a "computer hold" on academic records. Students must overcome deficiencies in basic skills, complete courses in the proper sequence, and maintain a minimum grade level or they cannot continue in college. During the last three years, the college put on probation or suspended more than 11,000 students whose grade-point averages fell below 1.5 (on a scale of 0 to 4).

The emphasis on academic standards at the expense of open admissions is generating mixed reactions among community-college educators. Even those who support changes, saying they have no choice but to tighten their standards because of decreasing financial support, are concerned about the outcome.

Robert H. McCabe, president of Miami-Dade, one of the first two-year institutions to emphasize academic standards, says, "The driving concept of the community college has been expanding access. The opening of opportunity to new populations has been surprisingly successful. However, the access revolution has also been a major contributor to the decline of standards."

He says the two-year college "must maintain its essential commitment to the open door" because it is the primary institution that provides educational opportunity for disadvantaged students.

But at Miami-Dade, he points out, "two-thirds of all entering students tested are deficient in reading, writing, or mathematics. More than 90 per cent of the blacks tested are deficient in one skill, and more than two-thirds are deficient in each of the basic-skills areas."

He adds, "For large numbers of Americans, it is too late to begin improvement of academic deficiencies at the community-college level." The colleges "must be prepared to suspend students if there is no evidence of reasonable progress."

Says Rosalie Hojegian, assistant dean of academic affairs at Passaic: "I don't know what the ramifications of what we are doing will be. It is a very difficult thing. It is not a popular position to be in."

Declining financial support, she says, has made tighter academic standards necessary at Passaic. "Our governing board is appalled at the number of bucks that have to be applied to remedial education. It is a drain on institutional resources.

"We have always been an institution with open arms that takes everyone in. Now that dollars are hard to get, we have to think about bringing in those students who have half a chance of getting through.

"Community-college students come in three types. One group will succeed in spite of us. One group will not make it no matter what we do. But there is a middle group. With proper support and tutorials and gentle guidance, these students will make it. We are trying to get to this middle group."

Connie Woodruff, director of community and public relations at Essex, says the college expects "to get better-caliber students" with higher admission standards. "If they know they will be in a classroom with their peers, better students will be more likely to come," she says. "We want to eliminate the image of the community college as a remedial school."

Ms. Woodruff says she hopes that excluding some students from the college "will force the public to take a second look at what is happening to students at the secondary level. We get graduates from high school who can't read and write. The public is paying twice for education."

Ernest H. Berg, an academic-program specialist at the California Community College system, says that more stringent standards may result in a decrease in the number of students who earn associate degrees, but students can transfer to four-year institutions without that degree.

"Certainly, it will be more difficult for vocational-education majors who do not normally take courses in rhetoric or expository writing to complete degree programs," he says. "Many students in high-tech or allied-health programs here already have to take more than the 60 units needed for graduation to satisfy the requirements in their areas and for the associate degree."

In the view of B. A. Barringer, president of Brookdale Community College in New Jersey, deciding not to admit students solely because they lack academic skills is "a dangerous and ill-advised reaction" to the problem of limited resources.

A recent follow-up survey of 100 Brookdale students who scored in the lowest 5 per cent on New Jersey's basic-skills test between 1978 and 1981, he says, showed that two of them had graduated. As a group, he says, they had completed 46 per cent of the regular college-level courses they had attempted.

"Obviously," he says, "there were those who did not succeed, but there are also many students who enter college with adequate skills who do not succeed. Poorly prepared students may never attain a degree, but they deserve a chance to learn."

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FACT-FILE

Evaluations of 596 Programs in Mathematics, Physical Sciences

WASHINGTON

Following are evaluations of 596 doctoral programs in chemistry, computer sciences, geosciences, mathematics, physics, and statistics, based on a survey conducted in April, 1981, by a committee of the Conference Board of Associated Research Councils. The board includes representatives of the American Council of Learned Societies, American Council on Education, Social Science Research Council, and National Research Council.

Chemistry

	Faculty quality (a)	Effectiveness (b)	Improvement (c)	Familiarity (d)
U. of Akron				
Chemistry	40	40	55	39
Polymer Science	48	50	55	35
U. of Alabama	42	41	45	44
American U. *	34	32	43	36
U. of Arizona	54	56	62	53
Arizona St. U.	50	53	52	47
U. of Arkansas	46	45	51	43
Atlanta U. *	29	26	n.a.	34
Auburn U.	39	38	45	38
Baylor U.	38	37	40	38
Boston C.	40	39	51	42
Boston U.	45	45	46	46
Brandeis U.	56	57	44	54
Brigham Young U.	45	45	51	42
Brown U.	54	54	41	50
Bryn Mawr C.	36	35	39	41
U. of California				
Berkeley	74	72	63	74
Davis	55	56	59	54
Irvine	56	56	60	56
Los Angeles	69	67	61	68
Riverside	51	49	42	52
San Diego	62	59	56	59
Santa Barbara	57	56	66	59
Santa Cruz	48	49	30	47
California Inst. of Tech.	74	73	56	73
Carnegie-Mellon U.	54	53	37	52
Case Western Reserve U.	53	53	26	53
Catholic U. of America	36	36	31	39
U. of Chicago	69	67	44	69
U. of Cincinnati	52	54	53	53
City U. of New York				
Graduate School	48	46	43	44
Clark U.	35	33	38	37
Clarkson C. of Tech.	44	46	46	47
Clemson U.	39	39	56	43
U. of Colorado	58	57	58	58
Colorado St. U.	56	55	80	60
Columbia U.	70	70	60	67
U. of Connecticut	46	47	48	42
Cornell U.	68	67	53	70
U. of Delaware	49	52	50	49
U. of Denver	38	37	53	40
Drexel U.	39	40	51	43
Duke U.	54	55	58	50
Emory U.	47	49	70	47
U. of Florida	57	57	56	55
Florida St. U.	57	57	51	58
Georgetown U.	44	47	49	41
Georgia Inst. of Tech.	55	55	56	55
U. of Georgia	55	54	47	55
Harvard U.	74	71	40	71
U. of Hawaii	47	48	52	46
U. of Houston	51	52	63	51
Howard U.	43	42	62	41
U. of Idaho	41	39	49	43
U. of Illinois				
Chicago Circle	47	48	52	49
Urbana	69	69	49	71
Illinois Inst. of Tech.	43	42	28	47
Indiana U.	62	60	61	64
Inst. of Paper Chemistry	36	41	38	34
U. of Iowa	49	51	41	49
Iowa St. U.	60	63	47	61
Johns Hopkins U.	56	56	35	55
U. of Kansas				
Chemistry	50	53	40	47
Pharmaceutical chemistry	44	50	n.a.	33
Kansas St. U.	49	49	61	50
Kent St. U.	43	45	41	40
U. of Kentucky	43	43	51	45
Louisiana St. U.	53	52	46	51
U. of Louisville	38	37	44	37
Loyola U. of Chicago	38	39	41	41
U. of Maryland	54	54	51	53
U. of Massachusetts	51	55	50	50
Massachusetts Inst. of Tech.	73	71	54	71
U. of Miami (Fla.)	37	35	45	39
U. of Michigan	58	58	40	63
Michigan St. U.	60	59	45	62
U. of Minnesota	61	59	68	61
U. of Missouri				
Columbia	42	40	45	45
Kansas City	40	40	49	40
Rolla	39	39	47	42
Montana St. U.	39	38	56	38
U. of Nebraska at Lincoln	53	54	71	53
U. of New Hampshire	42	42	41	41
U. of New Mexico	42	45	52	40
U. of New Orleans	46	45	41	48
New York U.	48	48	36	48
U. of North Carolina	62	63	69	60
North Carolina St. U.	45	48	58	45
U. of North Dakota	39	34	41	39
North Dakota St. U.	37	36	43	37
North Texas St. U.	40	36	46	39
Northeastern U.	41	43	52	43
Northern Illinois U.	38	38	45	40
Northwestern U.	65	64	45	67
U. of Notre Dame	51	50	44	55
Ohio U.	40	39	35	41
Ohio St. U.	63	62	52	66
U. of Oklahoma	47	48	55	44
Oklahoma St. U.	44	45	57	44
U. of Oregon	58	57	58	53
Oregon St. U.	52	54	52	51
U. of Pennsylvania	59	59	55	59
Pennsylvania St. U.	60	60	54	64
U. of Pittsburgh	57	57	41	58
Poly. Inst. of New York	44	48	35	40
Princeton U.	64	64	39	67
Purdue U.	64	62	56	69
Rensselaer Poly. Inst.	50	53	52	45
U. of Rhode Island	41	42	47	38
Rice U.	58	59	52	57
U. of Rochester	59	60	68	56
Rutgers U.				
New Brunswick	52	53	50	51
Newark	41	42	43	42
U. of South Carolina	52	54	73	49
U. of South Florida	37	35	45	41
U. of Southern California	59	56	73	59
Southern Illinois U., Carbondale	41	40	33	44
U. of Southern Mississippi	32	30	47	35
Stanford U.	[illegible]	68	35	69
State U. of New York				
Binghamton	44	45	47	47
Buffalo	55	55	50	56
Stony Brook	56	54	49	57
C. of Environmental Science & Forestry	44	42	30	38
Syracuse U.	48	49	46	50
Temple U.	41	40	47	41
U. of Tennessee	47	49	52	41
Texas A&M U.	61	58	67	61
Texas Tech U.	46	45	59	49
U. of Texas	63	61	64	61
Tulane U.	40	40	35	46
Utah St. U.	40	41	52	37
U. of Utah	62	59	73	63
Vanderbilt U.	50	50	49	48
U. of Vermont	46	46	51	45
U. of Virginia	52	53	67	51
Virginia Poly. Inst. & St. U.	48	51	57	48
U. of Washington	59	57	49	58
Washington St. U.	50	54	57	46
Washington U. (Mo.)	52	52	52	48
Wayne St. U.	54	54	45	56
Western Michigan U.	34	31	38	39
U. of Wisconsin				
Madison	69	67	49	70
Milwaukee *	43	45	61	44
U. of Wyoming	38	35	42	43
Yale U.	64	64	52	64

Computer Sciences

	Faculty quality (a)	Effectiveness (b)	Improvement (c)	Familiarity (d)
U. of Arizona	48	48	57	54
Brown U. *	54	53	63	57
California Inst. of Tech. *	50	50	40	50
U. of California				
Berkeley	70	69	57	68
Irvine	49	47	42	50
Los Angeles	63	62	57	60
San Diego	51	45	49	49
Santa Barbara	46	43	50	48
Carnegie-Mellon U.	73	71	50	72
Case Western Reserve U.	37	36	24	40
Columbia U. *	50	45	67	49
U. of Connecticut	41	41	54	43
Cornell U.	68	68	49	67
Duke U. *	49	50	56	46
Georgia Inst. of Tech.	52	51	75	50
U. of Illinois	63	63	46	62
Indiana U. *	48	46	66	49
U. of Iowa	41	43	44	41
Iowa St. U.	42	45	51	40
U. of Kansas *	44	43	38	47
Kansas St. U. *	33	33	41	34
U. of Maryland	56	58	54	61
Massachusetts Inst. of Tech.	74	73	50	72
U. of Massachusetts *	53	52	55	53
Michigan St. U.	39	39	42	36
U. of Minnesota	52	52	52	49
U. of Missouri, Rolla *	37	37	50	37
New York U.	53	53	45	51
U. of North Carolina	52	54	49	53
Northwestern U.	49	50	50	45
Ohio St. U.	49	51	49	51
U. of Oklahoma	32	48	n.a.	33
U. of Pennsylvania	52	54	49	53
Pennsylvania St. U.	46	46	24	51
U. of Pittsburgh *	44	45	41	46
Poly. Inst. of New York	37	38	35	36
Princeton U.	55	57	35	57
Rice U.	49	51	50	43
U. of Rochester *	52	54	70	55
Rutgers U. *	49	47	60	47
State U. of New York				
Buffalo	48	49	43	51
Stony Brook *	52	56	52	52
U. of Southern California	57	56	57	60
Southern Methodist U.	41	40	37	41
Stanford U.	75	74	48	74
Stevens Inst. of Tech.	36	38	45	34
Syracuse U.	49	48	50	44
U. of Texas	57	60	55	60
Texas A&M U.	35	36	44	37
U. of Utah *	53	57	45	54
Vanderbilt U.	43	42	64	44
U. of Virginia	42	44	55	40
U. of Washington	59	59	69	59
Washington St. U.	40	40	52	38
Washington U. (Mo.)	39	41	45	39
U. of Wisconsin	57	58	56	57
Yale U.	60	61	49	61

Geosciences

	Faculty quality (a)	Effectiveness (b)	Improvement (c)	Familiarity (d)
U. of Alaska	45	41	58	35
U. of Arizona *	59	60	74	60
Arizona St. U. *	52	53	66	55
Boston U.	30	29	39	38
Brown U.	59	59	59	65
U. of California				
Berkeley				
Geology	64	61	36	65
Geophysics	57	57	40	49
Davis	50	52	53	53
Los Angeles	69	65	59	69
Riverside	38	41	35	47
Santa Barbara	59	60	67	63
Santa Cruz	52	53	54	54
California Inst. of Tech.	74	73	54	73
Case Western Reserve U.	41	41	20	46
U. of Chicago	66	61	54	63
U. of Cincinnati	48	48	56	51
U. of Colorado	52	55	54	54
Columbia U.	67	65	44	68
Cornell U.	63	62	70	66
U. of Delaware	37	39	51	39
Florida St. U.	41	42	45	44
George Washington U.	33	34	40	33
Harvard U.	65	64	42	68
U. of Hawaii	50	47	56	51
U. of Houston *	42	36	55	41
U. of Idaho	34	[illegible]	48	35
U. of Illinois	53	54	42	54
Indiana U.	53	57	56	51
U. of Iowa	44	48	51	41
Iowa St. U.	41	37	52	38
Johns Hopkins U.	58	59	43	53
U. of Kansas	49	50	44	49
U. of Kentucky	40	33	55	41
Lehigh U.	40	38	41	44
Louisiana St. U.	44	48	54	44
Massachusetts Inst. of Tech.	72	72	61	70
U. of Massachusetts	51	52	58	53
U. of Miami	52	52	53	48
" of Michigan	57	59	51	59
Michigan St. U.	44	45	45	46
U. of Minnesota	54	55	48	56
U. of Missouri				
Columbia	41	41	39	40
Rolla				
Geological engineering	30	26	n.a.	31
Geology/geophysics	36	35	41	36
U. of Montana	41	45	51	42
U. of New Mexico	47	48	56	48
New Mexico Inst. of Mining & Tech.	44	47	56	43
U. of North Carolina	50	53	58	51
U. of North Dakota	31	27	41	35
Northwestern U.	58	57	36	58
Ohio St. U.				
Geodetic science	53	49	n.a.	32
Geology & mineralogy	50	51	50	49
U. of Oklahoma	46	43	37	47
U. of Oregon	50	53	47	53
Oregon St. U.	45	47	51	52
Pennsylvania St. U.				
Geochemistry & mineralogy	62	60	51	54
Geology	54	55	42	49
Geophysics	51	50	52	41
U. of Pittsburgh	42	42	44	40
Princeton U.				
Geological & geophysical sciences	63	62	48	69
Geophysical fluid dynamics	65	61	51	43
Purdue U.	49	49	64	47
Rensselaer Poly. Inst.	44	43	45	46
Rice U.	47	47	27	54
Saint Louis U.	39	45	43	38
U. of South Carolina	50	50	70	51
U. of Southern California	52	54	56	55
Southern Methodist U.	45	46	51	49
Stanford U.				
Applied earth sciences *	56	57	38	51
Geology	60	62	29	63
Geophysics	66	66	59	57
State U. of New York				
Albany *	57	52	50	60
Binghamton	46	46	40	49
Stony Brook	59	58	52	58
Syracuse U.	42	44	42	43
U. of Tennessee	39	40	48	44
U. of Texas				
Austin	60	60	60	64
Dallas	46	49	52	49
Texas A&M U.				
Geology	50	50	56	50
Geophysics	53	50	61	48
U. of Tulsa	26	25	33	34
U. of Utah	51	53	60	49

Continued on Following Page

Note: Ratings are standardized on a scale where 50 represents the average score for all rated departments.

(a) Rating of scholarly quality of faculty members in the program.

(b) Rating of the effectiveness of the program in education of research scholars or scientists.

(c) Rating of improvement in program quality in the last five years.

(d) Rating of the evaluators' familiarity with the work of program faculty.

* Program was initiated after 1970.

n.a. Not available.

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FACT-FILE – Continued

Geosciences

Continued

	Faculty quality (a)	Effectiveness (b)	Improvement (c)	Familiarity (d)
U. of Virginia	43	42	59	36
Virginia Poly. Inst. & St. U.	59	58	66	61
U. of Washington	55	56	50	58
Washington St. U.	40	40	46	39
Washington U. (Mo.)	47	50	70	43
West Virginia U.	40	40	49	36
U. of Wisconsin	60	62	48	60
U. of Wyoming	48	50	55	48
Yale U.	64	62	37	68

Mathematics

	Faculty quality (a)	Effectiveness (b)	Improvement (c)	Familiarity (d)
Adelphi U.	33	35	n.a.	35
U. of Alabama	34	30	45	36
U. of Arizona	50	50	58	49
Auburn U.	42	42	47	41
Boston U.	40	36	52	38
Bowling Green St. U. *	37	34	n.a.	39
Brandeis U.	61	59	31	59
Brown U.	64	64	57	66
U. of California				
Berkeley	72	71	50	71
Davis	46	48	45	41
Los Angeles	63	64	59	64
Riverside	47	50	44	44
San Diego	57	58	66	60
Santa Barbara	50	52	44	49
California Inst. of Tech.	62	62	46	63
Carnegie-Mellon U.	53	57	44	45
Case Western Reserve U.	50	50	49	51
U. of Chicago	71	70	42	68
U. of Cincinnati	42	44	58	43
City U. of New York				
Graduate School	59	56	38	56
Claremont Graduate School	47	47	40	47
Clarkson C. of Tech.	39	38	47	40
Clemson U.	40	43	57	41
U. of Colorado	52	54	55	49
Colorado St. U.	42	40	55	40
Columbia U.	67	63	45	64
U. of Connecticut	43	41	52	43
Cornell U.	64	64	47	67
Dartmouth C.	50	50	39	49
U. of Delaware	45	46	71	48
U. of Denver	37	35	35	40
Duke U.	52	49	53	51
Emory U.	38	39	19	38
U. of Florida	46	47	51	44
Florida St. U.	47	49	32	44
Georgia Inst. of Tech.	45	46	58	43
U. of Georgia	46	46	59	47
Harvard U.	71	71	42	71
U. of Houston	42	44	54	40
U. of Illinois				
Chicago Circle	54	52	71	56
Urbana	63	63	47	65
Illinois Inst. of Tech.	34	32	n.a.	36
Indiana U.	58	58	51	62
U. of Iowa	46	49	50	43
Iowa St. U.	45	44	39	43
Johns Hopkins U.	57	53	29	51
U. of Kansas	46	46	39	44
Kent St. U. *	41	42	52	42
U. of Kentucky	52	55	72	52
Louisiana St. U.	50	51	45	48
U. of Maryland				
Applied mathematics *	58	56	52	47
Mathematics	58	58	60	61
Massachusetts Inst. of Tech.	72	70	50	71
U. of Massachusetts	50	52	58	51
U. of Michigan	64	65	50	70
Michigan St. U.	50	52	51	54
U. of Minnesota	62	62	54	62
U. of Missouri				
Columbia	41	39	40	43
Rolla	35	38	36	39
U. of Montana	35	34	48	38
U. of Nebraska	42	41	48	40
U. of New Mexico	45	45	40	47
New York U.	69	68	34	66
U. of North Carolina	53	53	56	56
North Carolina St. U.	44	44	58	41
Northeastern U.	48	48	64	45
Northwestern U.	58	57	51	61
U. of Notre Dame	51	53	42	49
Ohio St. U.	53	55	53	56
Ohio U. *	37	33	45	39
U. of Oklahoma	44	44	52	42
Oklahoma St. U.	40	41	50	43
U. of Oregon	53	54	48	50
Oregon St. U.	47	48	54	46
U. of Pennsylvania *	60	59	39	59
Pennsylvania St. U.	53	55	64	56
U. of Pittsburgh	48	52	52	45
Poly. Inst. of New York	44	44	n.a.	40
Princeton U.	73	73	45	73
Purdue U.	58	59	49	61
Rensselaer Poly. Inst.	51	52	48	45
Rice U.	57	59	48	56
U. of Rochester	51	53	45	51
Rutgers U.	59	59	64	63
Saint Louis U.	31	31	n.a.	36
U. of South Carolina	41	39	61	41
U. of South Florida *	38	39	57	43
U. of Southern California	52	51	46	54
Southern Illinois U.	39	36	50	42
Stanford U.	69	69	44	68
State U. of New York				
Albany	48	50	51	47
Binghamton	41	41	47	44
Buffalo	51	52	46	53
Stony Brook	61	59	59	60
Stevens Inst. of Tech.	35	38	n.a.	36
Syracuse U.	47	47	34	46
Temple U.	47	45	53	45
U. of Tennessee	44	47	60	42
Texas Tech U.	40	40	64	42
U. of Texas				
Arlington *	40	39	65	43
Austin	56	55	74	58
Tulane U.	50	53	45	52
U. of Utah	55	53	80	60
Vanderbilt U.	44	44	50	43
U. of Virginia	53	55	30	52
Virginia Poly. Inst. & St. U.	47	47	64	45
U. of Washington	59	59	59	61
Washington U. (Mo.)	55	55	45	52
Wayne St. U.	45	44	55	46
Wesleyan U.	42	43	50	42
Western Michigan U.	35	33	47	38
U. of Wisconsin				
Madison	65	66	45	72
Milwaukee	40	41	42	40
Yale U.	69	67	49	68

Physics

	Faculty quality (a)	Effectiveness (b)	Improvement (c)	Familiarity (d)
American U.	37	36	42	41
U. of Arizona	54	53	61	55
Arizona St. U.	40	41	54	42
Auburn U.	35	34	n.a.	37
Boston C.	35	29	n.a.	36
Boston U.	47	46	55	45
Brandeis U.	55	55	38	54
Brown U.	58	56	52	55
U. of California				
Berkeley	72	70	37	72
Davis	48	49	51	49
Irvine	54	54	51	58
Los Angeles	62	60	52	64
Riverside	47	48	48	47
San Diego	65	61	46	65
Santa Barbara	61	58	76	60
Santa Cruz *	47	48	54	49
California Inst. of Tech.	73	71	43	7[illegible]
Carnegie-Mellon U.	59	57	42	5[illegible]
Case Western Reserve U.	53	53	38	55
Catholic U. of America	43	46	39	44
U. of Chicago	70	69	41	67
U. of Cincinnati	43	46	46	45
City U. of New York				
Graduate School	55	53	53	53
Clarkson C. of Tech.	34	32	39	39
Clemson U.	41	40	n.a.	38
U. of Colorado	54	55	44	57
Colorado St. U.	40	46	53	39
Columbia U.	69	63	29	67
U. of Connecticut	47	48	50	50
Cornell U.	70	74	58	69
Dartmouth C.	46	55	50	41
U. of Delaware	44	43	60	43
U. of Denver	40	32	n.a.	36
Drexel U.	41	42	49	45
Duke U.	53	54	45	53
U. of Florida	49	51	69	50
Florida St. U.	53	52	59	53
Georgetown U.	34	n.a.	n.a.	36
Georgia Inst. of Tech.	47	47	45	45
Harvard U.	73	73	46	72
U. of Houston	45	42	72	39
Howard U.	34	36	n.a.	37
U. of Illinois				
Chicago Circle	44	45	52	47
Urbana	67	66	50	70
Illinois Inst. of Tech.	40	39	45	43
Indiana U.	55	54	55	56
U. of Iowa	49	52	43	45
Iowa St. U.	53	52	46	50
Johns Hopkins U.	55	56	36	51
U. of Kansas	45	46	45	47
Kansas St. U.	43	41	42	41
Kent St. U.	41	41	53	42
U. of Kentucky	41	40	62	47
Louisiana St. U.	49	44	59	50
U. of Maryland	61	59	38	67
U. of Massachusetts	50	51	61	53
Massachusetts Inst. of Tech.	72	71	45	73
U. of Michigan	60	60	43	60
Michigan St. U.	56	55	59	60
U. of Minnesota	59	57	44	56
U. of Missouri				
Columbia	43	43	66	41
Rolla	43	49	60	43
Montana St. U.	41	42	62	42
U. of Nebraska	48	48	45	46
U. of Nevada	32	n.a.	n.a.	35
U. of New Hampshire	40	n.a.	56	38
U. of New Mexico	44	43	75	41
New York U.	55	55	41	55
U. of North Carolina	53	55	50	53
North Carolina St. U.	45	45	72	44
North Texas St. U.	36	30	52	41
Northeastern U.	50	50	47	51
Northwestern U.	54	55	44	54
U. of Notre Dame	47	48	45	50
Ohio State U.	53	53	52	55
Ohio U.	44	48	48	45
U. of Oklahoma	44	44	68	40
Oklahoma St. U.	41	40	n.a.	37
U. of Oregon	51	50	47	52
Oregon St. U.	41	40	45	40
U. of Pennsylvania	64	62	37	66
Pennsylvania St. U.	48	52	47	52
U. of Pittsburgh	55	55	49	58
Poly. Inst. of New York	42	40	43	40
Princeton U.	72	72	42	70
Rensselaer Poly. Inst.	48	55	45	47
Rice U.	52	55	43	51
U. of Rochester	58	57	37	62
Rockefeller U.	63	55	35	57
Rutgers U.	55	55	50	60
U. of South Carolina	40	38	56	41
U. of Southern California	50	51	49	48
Southern Illinois U.	38	31	n.a.	36
Stanford U.				
Applied physics	65	69	52	53
Physics	70	71	43	70
State U. of New York				
Albany	41	41	48	47
Buffalo	40	37	35	43
Stony Brook	65	62	58	66
Stevens Inst. of Tech.	47	46	36	46
Syracuse U.	52	55	47	49
Temple U.	46	46	42	46
U. of Tennessee	49	48	56	44
U. of Texas				
Austin	62	55	83	60
Dallas *	43	39	n.a.	39
Health Science Center at Houston	n.a.	n.a.	n.a.	34
Texas A&M U.	50	48	63	50
Tufts U.	45	48	43	42
Tulane U.	35	30	51	40
U. of Utah	47	48	60	48
Utah St. U.	37	37	n.a.	36
Vanderbilt U.	46	49	49	44
Virginia Poly. Inst. & St. U.	52	48	73	53
U. of Virginia	53	54	59	57
U. of Washington	62	60	65	64
Washington St. U.	36	38	n.a.	37
Washington U. (Mo.)	51	53	44	51
Wayne St. U.	42	39	31	43
C. of William & Mary	47	48	53	46
U. of Wisconsin				
Madison	61	60	42	65
Milwaukee	42	42	45	42
U. of Wyoming	40	40	51	40
Yale U.	65	65	42	66

Statistics

	Faculty quality (a)	Effectiveness (b)	Improvement (c)	Familiarity (d)
American U.	30	28	45	31
Boston U.	35	37	48	38
U. of California				
Berkeley	72	70	59	70
Los Angeles	59	58	52	58
Riverside *	46	46	69	47
Carnegie-Mellon U.	57	58	71	58
Case Western Reserve U. *	37	37	34	36
U. of Chicago	70	65	56	65
Colorado St. U.	54	56	52	55
Columbia U.	61	58	48	59
U. of Connecticut	43	42	49	49
Cornell U.	62	62	48	63
U. of Delaware *	39	34	57	41
U. of Florida	45	47	53	49
Florida St. U.	51	62	48	61
George Washington U.	48	45	26	51
U. of Georgia	39	39	52	44
Harvard U.	62	56	49	62
U. of Illinois	57	50	53	51
Indiana U.	39	36	34	49
U. of Iowa	52	55	51	57
Iowa St. U.	62	64	53	64
Johns Hopkins U.	50	53	44	44
Kansas St. U.	40	43	49	37
U. of Kentucky	48	47	49	53
U. of Maryland *	37	34	52	38
U. of Michigan	53	55	48	48
Michigan St. U.	53	54	44	51
U. of Minnesota				
Biometry	43	44	46	36
Statistics	60	60	51	60
U. of Missouri				
Columbia	44	46	44	45
Rolla	36	34	46	39
U. of New Mexico	43	45	45	42
U. of North Carolina				
Biostatistics	60	62	52	59
Statistics	63	62	43	62
North Carolina St. U.				
Biomathematics	45	47	35	34
Statistics	53	57	45	52
Ohio St. U. *	47	50	51	51
Oklahoma St. U.	39	46	45	40
Oregon St. U.	50	53	49	48
U. of Pennsylvania	47	48	54	46
Pennsylvania St. U.	49	52	52	52
U. of Pittsburgh				
Biostatistics	40	39	46	34
Mathematics & statistics *	53	45	78	53
Princeton U.	62	56	43	65
Purdue U.	61	60	56	61
U. of Rochester	52	53	50	52
Rutgers U.	54	54	44	52
State U. of New York				
Buffalo	40	42	15	44
Stony Brook	44	42	66	46
U. of South Florida *	41	32	59	44
Southern Methodist U.	48	51	48	50
Stanford U.	72	73	55	69
Temple U. *	39	41	48	39
Texas A&M U.	53	55	63	59
U. of Texas Health Science Center				
Houston	46	45	57	37
Virginia Commonwealth U.	33	36	41	34
Virginia Poly. Inst. & St. U.	51	54	56	55
U. of Washington	61	62	77	55
U. of Wisconsin	66	67	54	67
U. of Wyoming *	40	41	48	40
Yale U.				
Epidemiology & public health	42	47	51	37
Statistics	60	57	46	60

Note. Ratings are standardized on a scale where 50 represents the average score for all rated departments.
(a) Rating of scholarly quality of faculty members in the program.
(b) Rating of the effectiveness of the program in education of research scholars or scientists.
(c) Rating of improvement in program quality in the last five years.
(d) Rating of the evaluators' familiarity with the work of program faculty.
* Program was initiated after 1970.
n.a. Not available.

SOURCE: CONFERENCE BOARD OF ASSOCIATED RESEARCH COUNCILS

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E CHRONICLE

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News Summary

Articles on inside pages

Anthony F. Aveni, named 1982 "Professor of the Year" by the Council for Advancement and Support of Education, is a pioneer of archaeoastronomy. Story on Page 6.

Twenty years later, the enrollment of a black student, James H. Meredith, in the then all-white University of Mississippi is still referred to as "The Crisis." Story on Page 9.

The Central Intelligence Agency may keep its contacts with American colleges secret, a federal appeals court has ruled. Story on Page 13.

National security is best served by allowing the open exchange of scientific information, says a National Academy of Sciences panel. Story on Page 13.

Tougher academic standards for college athletes have been proposed by a committee of college presidents. Story on Page 19.

The major associations governing college sports are attracting many women's athletic teams to their programs because of the demise of the Association for Intercollegiate Athletics for Women. Story on Page 19.

Israeli students and academics were among those calling for an investigation of the massacre of Palestinian refugees in Beirut. Story on Page 23.

Electronic journals that make scientific information available by computer are either "garbage heaps" or advances in scholarly publishing—depending on your point of view. Story on Page 25.

New assistant professors of business, computer science, and engineering are better paid than faculty members of that rank in other fields, according to a survey of faculty salaries at state universities. Story on Page 29.

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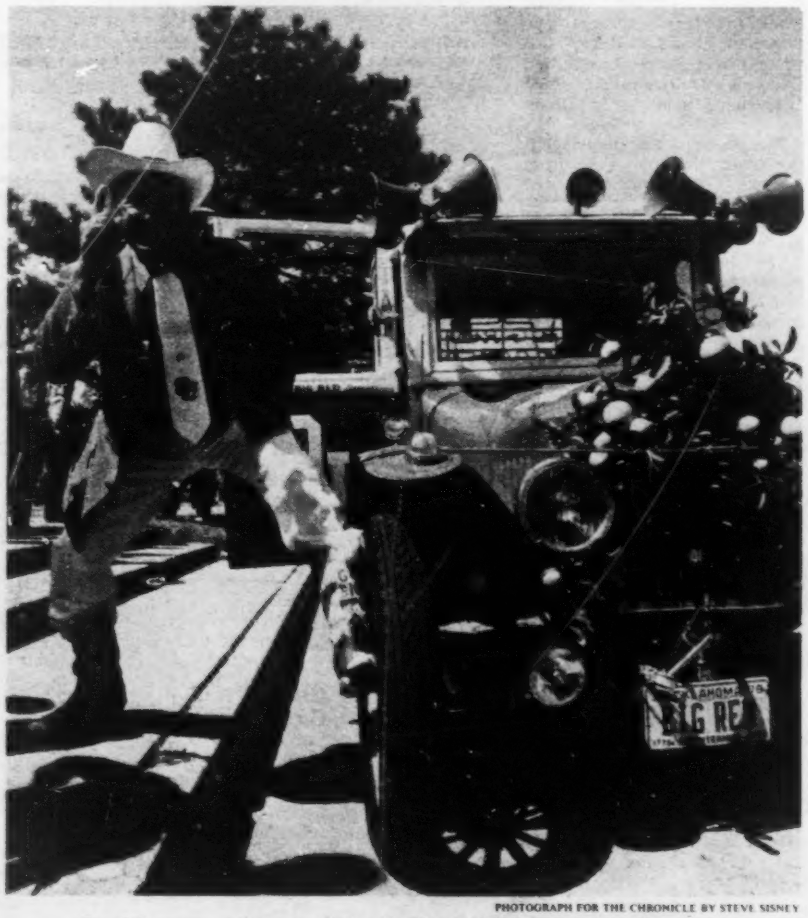
EVEN HIS CAR IS RED AND WHITE



PHOTOGRAPH FOR THE CHRONICLE BY STEVE SISNEY

Cecil Samara, who says he's the U. of Oklahoma's No. 1 fan, gets ready for a football game with the U. of Southern California. Story on Page 21.

Possible Faculty Shortage in 1990's Worries Today's Academic Leaders

By MALCOLM G. SCULLY

Worried that colleges and universities will face a shortage of well-qualified faculty members in the mid-1990's, some foundation and university officials are hoping to persuade bright students in the humanities to pursue academic careers despite the current dismal job market.

The most ambitious effort to address the problem is a new program of graduate fellowships in the humanities, financed by the Andrew W. Mellon Foundation and administered by the Woodrow Wilson National Fellowship Foundation in Princeton, N.J.

Starting in the 1983-84 academic year, 100 to 125 Mellon Fellowships will be awarded annually to outstanding students who are beginning graduate school. The first fellows will be named next March.

The foundation estimates it will spend $24-million on the program over 10 years.

In announcing the fellowships, Robert F. Goheen, director of the program, said it had two purposes:

▶ "To help assure that the next generation of teachers and scholars will include men and women of the highest ability."

▶ "To help sustain the nation's leading graduate schools and the continuity of teaching and scholarship in fundamental fields of learning."

Mr. Goheen, a former president of Princeton University and a former U.S. Ambassador to India, said in an interview that, because of the dismal job prospects facing young scholars in the humanities over the next several years, many faculty members had been discouraging some of their best students from going to graduate school. "A lot of the students don't need

Continued on Page 10, Column 1

Court to TIAA: Pay Men, Women Equal Pensions

Supreme Court appeal appears certain

By CHERYL M. FIELDS

A federal appeals court has ruled that the Teachers Insurance and Annuity Association–College Retirement Equities Fund must begin paying men and women equal retirement benefits.

A three-judge panel of the U. S. Court of Appeals for the Second Circuit last week not only unanimously upheld a district court's ruling that C.R.E.F. must use sex-neutral mortality tables in calculating all pension benefits paid to people retiring after May 10, 1980, but it also extended the ruling to cover T.I.A.A.

The appeals court also upheld the lower court's ruling that ordered Long Island University, where the case arose, not to contribute to any plan that "continues to use sex-based mortality tables to calculate retirement benefits for employees retiring after June 1, 1980."

Enforcement of the district court's order had been stayed pending the appeals court's decision. A spokesman for T.I.A.A.-C.R.E.F said last week that the company also would seek a stay of the circuit court's ruling and would appeal the case to the Supreme Court.

The Court already has been asked to review two other cases raising similar issues.

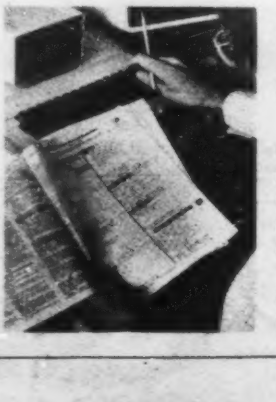
AAUP 'Very Pleased'

Said a spokesman for the American Association of University Professors, which opposed the pension company in the case: "We are very pleased with the decision. It vindicates the position we have been taking for years."

About 85 per cent of private four-year colleges and universities and 40 per cent of public institutions have T.I.A.A.-C.R.E.F. plans.

In its ruling, the Second Circuit rejected several arguments that T.I.A.A.-C.R.E.F. had used to defend its current plans, under which women and men make identical contributions to their pension plans, but women receive lower monthly retirement benefits—based on the fact that the average

Continued on Page 30, Column 1



Does a Personal Computer Rate a Tax Deduction?

Academics who purchase personal computers to use in their work may be able to deduct up to the full purchase price of the machines and related equipment on their federal income-tax returns, say tax lawyers and other specialists, including a spokesman for the Internal Revenue Service.

For details, see the "Personal & Professional" section, which begins on Page 29

FACT–FILE

A Profile of 1980-81 Recipients of Doctorates

	Arts and humanities	Computer sciences	Education	Engineering	Life sciences	Mathematics	Physical sciences	Social sciences	All fields†
Doctoral degrees conferred	3,745	232	7,489	2,528	5,461	728	3,208	6,505	31,319
Sex									
Male	58.7%	88.8%	52.8%	96.1%	73.6%	84.6%	88.7%	64.4%	68.5%
Female	41.3%	11.2%	47.2%	3.9%	26.4%	15.4%	11.3%	35.6%	31.5%
Racial or ethnic group‡									
American Indian	12	—	42	4	11	1	1	14	89
Asian	56	16	119	282	212	40	158	135	1,062
Black	93	2	589	19	80	9	28	223	1,104
Puerto Rican	23	—	38	5	10	2	12	16	115
Mexican-American	17	—	78	2	15	—	3	45	161
Other Hispanic	64	—	46	9	38	3	21	61	249
White	2,964	182	5,561	1,082	4,021	446	2,198	4,980	22,400
Other or unknown	139	8	224	54	206	22	158	208	1,082
Citizenship									
United States	85.7%	72.4%	87.7%	46.2%	80.3%	65.9%	75.4%	84.0%	79.8%
Foreign	10.2%	25.9%	8.8%	49.1%	17.1%	31.5%	21.3%	11.9%	16.6%
Unknown	4.1%	1.7%	3.6%	4.7%	2.6%	2.6%	3.3%	4.2%	3.6%
Marital status									
Married	57.0%	54.3%	67.9%	61.6%	59.3%	49.7%	53.1%	56.6%	60.1%
Not married	36.5%	41.4%	27.3%	32.7%	36.6%	46.0%	42.1%	37.5%	34.7%
Unknown	6.4%	4.3%	4.8%	5.6%	4.1%	4.3%	4.8%	5.9%	5.2%
Median age at doctorate	33.5	30.1	37.3	30.5	30.1	29.2	29.0	32.0	32.4
Median number of years from bachelor's degree to doctorate	10.8	7.7	13.5	7.9	7.3	6.9	6.7	9.0	9.4
Per cent with bachelor's degrees in same field as doctorate	61.0%	13.8%	38.9%	74.1%	40.7%	80.2%	76.6%	59.1%	53.3%
Planned postdoctoral study									
Fellowship	2.6%	2.2%	1.0%	3.7%	27.9%	6.7%	14.9%	6.7%	8.9%
Research associateship	0.9%	3.0%	0.9%	7.6%	15.6%	5.8%	22.7%	2.8%	6.7%
Traineeship	0.2%	0.9%	0.6%	1.5%	1.6%	1.4%	0.5%	1.7%	1.0%
Other	1.9%	0.4%	0.7%	0.4%	4.9%	1.4%	0.8%	1.4%	1.7%
Planned postdoctoral employment									
Educational institution	67.5%	46.6%	66.3%	24.7%	24.2%	53.7%	10.8%	41.2%	44.3%
Industry or business	6.9%	35.3%	5.8%	42.6%	9.2%	18.0%	34.7%	11.1%	14.2%
Government	3.3%	4.7%	10.2%	9.6%	7.3%	5.1%	7.0%	13.7%	8.8%
Nonprofit organization	4.2%	0.4%	5.0%	1.6%	1.7%	0.8%	0.8%	9.5%	4.7%
Other or unknown	4.7%	3.0%	3.9%	1.7%	2.3%	1.2%	1.6%	5.2%	3.4%
Postdoctoral status unknown	7.9%	3.4%	5.7%	6.7%	5.5%	5.9%	6.3%	6.7%	6.3%
Primary postdoctoral work									
Research and development	5.0%	60.5%	5.9%	62.6%	50.2%	42.6%	75.2%	21.9%	26.2%
Teaching	74.2%	29.3%	39.1%	22.1%	29.1%	49.4%	14.2%	36.6%	39.7%
Administration	6.4%	3.0%	36.2%	2.4%	5.1%	1.1%	2.0%	7.8%	14.2%
Professional services	5.1%	2.4%	11.5%	5.4%	7.0%	3.1%	3.2%	26.6%	12.1%
Other	5.1%	1.8%	1.8%	2.6%	3.5%	1.6%	2.6%	3.0%	2.9%
Unknown	4.2%	3.0%	6.4%	4.9%	5.0%	2.2%	2.8%	4.1%	4.8%

Note: Figures do not include first professional degrees, such as M.D. or D.D.S.
† Includes degree categories not listed separately.
‡ Includes only U.S. citizens and foreign persons with permanent visas.

SOURCE: SURVEY OF EARNED DOCTORATES, NATIONAL RESEARCH COUNCIL

General Education Found Gaining Faculty Support

WASHINGTON

General-education programs are getting increased support from faculty members, according to a survey of curriculum changes.

The survey, by the Association of American Colleges, found that over the past three years 78 per cent of administrators and 71 per cent of faculty members had developed more favorable attitudes toward general education—the courses required of all undergraduates, regardless of their major field of study.

The survey report found the increased support among faculty members more surprising than that from administrators.

"Faculty members may be returning to undergraduate instruction because of declines in graduate education and research," the report said, "or those in the liberal arts may be attempting to regain students lost in recent years to vocational fields."

The survey gathered data from 125 colleges and universities that were reviewing or revising their curricula. At about half the institutions, curriculum changes were still in the planning stages and had not been put into effect.

The survey report was written by Jerry G. Gaff, director of the A.A.C.'s Center for General Education, and Thomas D. Klein, associate professor of English at Bowling Green State University.

Departments Called Obstacles

The greatest obstacles to change in the curricula, their report said, were departmental efforts to protect their academic turf, cited by 58 per cent of the institutions, and faculty resistance, cited by 40 per cent. Lack of funds was mentioned as a barrier to change by only 13 per cent of the institutions.

The report said a majority of the institutions surveyed had increased the amount of general education required of students.

Four-year institutions in the survey required an average of 44 semester hours of general studies—representing more than a third of the total credits required for graduation. At two-year institutions, the average requirement was 31 semester hours of general education, representing 52 per cent of the total required for graduation.

In a third to a half of the institutions, required studies in the humanities, arts, natural sciences, and social sciences had been increased.

In 99 per cent of the general-education programs, development of writing skills was an explicit part of the program.

Other skills included in the general-education programs were: mathematics, reported by 82 per cent of the institutions; critical thinking, 79 per cent; problem solving, 72 per cent; research-library skills, 63 per cent; speaking, 61 per cent; foreign language, 57 per cent; computer literacy, 45 per cent; and interpersonal relations, 34 per cent.

—JACK MAGARRELL

'Professor of the Year'

Continued from Preceding Page

binds together the building blocks we call courses in the undergraduate curriculum. Here we'd seen general education, which was at the core of this institution's curriculum, dissolve and break apart. The catalogue became a meaningless mélange of courses that didn't hang together, and yet we were calling it a core. It was out of a feeling of embarrassment over what that program had become that I wanted to have something to do with changing it."

The folk wisdom is that teaching and community service are often on the losing end in the competition with scholarship for the serious attention of a college professor, but "Tony has shown that these can be brought into happy harmony," says Mr. Rembert.

Mr. Aveni's service to his university was another factor in his being selected Professor of the Year, for which he will receive a $5,000 prize donated by the late Thomas B. McCabe, a former president of the Scott Paper Company.

An exciting aspect of the award, according to Mr. Aveni, is his lecture this Thursday at the Smithsonian.

"I'd like people to go away understanding that the present and its problems are not unique," he says, "that not only did we have a past but other people had a past, and they, too, had their problems and solutions, their loves and hates, *and* their intellectual pursuits.

"It would be easy for me to get people to say, 'Gee, weren't those Mayas amazing folks,' and now, back to your regular channel. Well, that's not enough.

"I'll spend most of my time showing how broad and how deep was that culture, and how religion was a driving force behind the great scientific achievement of the Mayas. Just to know *that* will help a person realize that there are possible scenarios for human inquiry other than our own."

Half of U.S. Ph.D's in Engineering Go to Foreigners

WASHINGTON

More foreigners than American citizens earned doctoral degrees in engineering from U.S. universities in 1981, according to the National Research Council's annual survey of new doctorates.

In a report on the survey, the council said 1981 was the first year since the studies began in 1958 in which the number of doctorates awarded to foreigners exceeded the number awarded to Americans in a broad field such as engineering.

Of the 2,528 doctoral degrees awarded in engineering in 1981, 49.1 per cent went to foreigners and 46.2 per cent to Americans, the report said. The nationality of the remaining 4.7 per cent was unknown.

The increasing proportion of foreign graduate students in engineering has provoked sharp Congressional debates over new immigration legislation that would require most foreign students to return to their home countries for at least two years after completing their studies.

Universities facing shortages of engineering faculty members and some high-technology companies seeking trained engineers have opposed the two-year rule. The Senate version of the legislation and a version now being considered in the House of Representatives both provide for waivers of the requirement in such fields as engineering.

7 Pct. Below 1973's Peak

Over all, the survey found that U.S. universities had awarded 31,319 doctorates in 1981, an increase of 303—less than 1 per cent—over 1980. The 1981 total was 7 per cent below the peak year of 1973, when 33,756 degrees were granted.

The survey also found that the proportion of doctorates going to women had increased—continuing a trend that began in 1965. That year, 11 per cent of 16,340 doctoral degrees went to women, compared with 31.5 per cent of 31,319 degrees in 1981. The number of men earning doctorates has declined each year since 1973.

The report added that for more than 60 per cent of the recipients of doctoral degrees in 1981, the primary source of financial support in graduate school had come from one of three sources: their own earnings, teaching assistantships, or research assistantships.

However, it showed that women were "far more likely to report financial support from their own earnings, spouse's earnings, and family contributions than men." Other findings:

► "From 1971 to 1981, the number of women doctorates in education more than doubled, while the corresponding number of men decreased 22 per cent. If this trend continues, education could become the first major field where the number of doctorates granted to women exceeds the number granted to men."

► "The number of women doctorates in the humanities increased for the first time since 1975," and in two fields—English literature and foreign languages—more women than men earned Ph.D.'s.

The survey of doctoral-degree recipients is conducted annually by the National Research Council for the National Science Foundation, the U.S. Office of Education, the National Institutes of Health, and the National Endowment for the Humanities.

—MALCOLM G. SCULLY

'In' Box

For colleges seeking more in-house computer programmers, there may be some hidden talent just across the quad or down the hall—in the music department. That's the tone and substance of a suggestion from a music scholar turned lawyer, Charlotte Roederer of the Buffalo firm of Moot & Sprague.

Speaking to college administrators recently on the ins and outs of computer contracts and related matters, Ms. Roederer said they might consider what some recruiters for the software industry have happily discovered about musicians: They tend to have a high degree of intuition and inventiveness—just the sort of qualities programmers need—and they've been trained in such a way that "discipline doesn't destroy their creativity."

■

The computer literacy of college students, already at such an impressive level that many academics are taking crash courses just to keep up, may be accelerated soon by federal legislation.

Apple Computer plans to donate up to 25,000 of its Apple II personal computers to elementary and secondary schools across the country if Congress enacts a special tax break that the company has been seeking.

One version of the measure, recently passed by the House, would enable Apple and other computer companies to deduct up to twice the production costs of equipment they donate to schools in 1983.

A smaller deduction would be allowed over three years under a different version of the bill that cleared the Senate Finance Committee last week.

Whatever the proposal's immediate fate, it's seen as a sign of the inevitable growth of computer education. The problem in this whole area today, says John W. McCredie, president of EDUCOM, an information-technology consortium, is that many colleges are simply "unprepared for the levels of kids that are starting to come in."

■

To some professors, the most important issue in the current debate over proposals to end mandatory retirement is how to mitigate the effects of inflation on the purchasing power of pension benefits of those already retired.

As one correspondent pointed out last week, excerpts published in *The Chronicle* of a report on retirement by the American Association of University Professors' Committee A omitted the panel's views on the benefits question.

To repair the omission: The committee said its objective of exempting faculty members from any "uncapping" of mandatory retirement should not be "purchased at a cost of the slow impoverishment of the retired faculty."

How that could be handled by legislation is technically difficult and unclear, the panel said. But it added that some attempt at an equitable solution "should be made a condition for any exemption."

Personal & Professional

Tax Savings for Personal Computers? Academics May Qualify, Experts Say

By ROBERT L. JACOBSON

WASHINGTON

College faculty members and administrators who've been wondering whether the time has finally come to buy their own personal computers may find an incentive in the federal tax laws. Depending on their personal and professional circumstances, they may be able to deduct up to the full purchase price of a computer and related equipment from their federal income taxes over several years, thus saving hundreds or even thousands of dollars.

Individual circumstances also may enable some members of academe to save even more on such purchases in the first year by claiming investment tax credits.

That is the general view of tax lawyers and other specialists, including a spokesman for the Internal Revenue Service, who were consulted by *The Chronicle*.

Specific Requirements Stressed

All of the experts stressed that tax savings are allowable only for those who satisfy specific requirements of the law. At a minimum, they agreed, the equipment in question would have to be used for work, not play. According to one lawyer, tax officials could be expected to draw a clear distinction between a simple home computer used mainly for games and a more sophisticated "business" computer or word processor.

But the experts also agreed that individual circumstances common to many professional employees in higher education would be adequate to support tax write-offs for computer purchases.

There are two main approaches to qualifying for tax deductions in such cases, the specialists indicated.

One is to claim a deduction in connection with a separate income-producing business, such as consulting, that the academic conducts in his or her home or place of work. The other is to claim a deduction for a personal expense directly related to academic work.

CHRONICLE PHOTOGRAPH BY JOHN C. PHILLIPS

Computer use in consulting work would be one justification for a tax deduction.

Definite rules and procedures apply to both approaches, and academics should realize that—as is always the case with tax returns—they may be called upon to substantiate their claims in an I.R.S. audit.

Those interested in the possibilities might begin with a review of several documents generally available without charge from I.R.S. offices.

- ▶ Publication 529—*Miscellaneous Deductions.*
- ▶ Publication 587—*Business Use of Your Home.*
- ▶ Form 2106—*Employee Business Expenses.*
- ▶ Schedule A—*Itemized Deductions.*
- ▶ Schedule C—*Profit or (Loss) from Business or Profession.*

New editions for the 1982 taxable year, which will take account of recent changes in the law, are expected to be available in about a month, the I.R.S. spokesman said. Meanwhile, 1981 editions are still available.

Publication 529 notes that taxpayers who itemize their deductions on Schedule A may deduct a variety of legitimate employee expenses, including those incurred for using a part of their home "regularly and exclusively in work," "research expenses of a college professor," "small tools and supplies," and "subscriptions to professional journals."

'Ordinary and Necessary'

According to the sources consulted by *The Chronicle*, the purchase of a personal computer qualifies as a deductible employee expense as long as the taxpayer can show that it is required in his employment and that his employer did not provide it or reimburse him for it.

"The law says you can deduct whatever is ordinary and necessary," the I.R.S. spokesman explained. Asked who determines whether the purchase of a personal computer is ordinary and necessary, the spokesman, who asked that his name not be published, replied, "Initially the taxpayer would."

He added that it would then be up to the Internal Revenue Service to accept or question the deduction, depending on the "facts and circumstances" of a particular taxpayer's claim.

Would an employee be well advised to

Continued on Following Page

New Assistant Professors' Pay Varies as Much as $5,800 at State Colleges

WASHINGTON

Administrators at 204 public, four-year colleges and universities have just received detailed information on how well they are paying their faculty members in 21 disciplines, rank by rank, in comparison with those at similar institutions across the country.

The data, collected in a survey by the College and University Personnel Association for the American Association of State Colleges and Universities, show that the average salaries of new assistant professors in such popular fields as business, computer sciences, and engineering at the 204 state colleges are several thousands of dollars higher this year than those of their counterparts in most other fields.

At the other end of the spectrum, the average pay of new assistant professors in foreign languages, history, and English is more than $2,000 below the average for all new faculty members in that rank.

Aggregate results from the survey, which covered full-time faculty members and is based on a 9- or 10-month academic year, are highlighted in a table and accompanying graphs on Page 31.

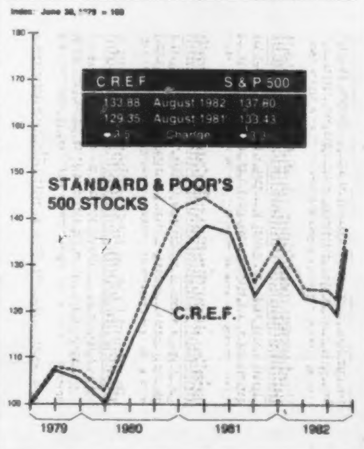
Adjustments to Market Conditions

The attention of administrators and faculty members at the survey's participating institutions is likely to be focused mainly on comparative salary data for each discipline and rank. Such breakdowns—which have not been part of the widely disseminated annual compensation reports of the American Association of University Professors—may be of value to colleges wishing to adjust their pay scales to market conditions.

College administrators "need to know what the market is," says Allan W. Ostar, president of the state-college association. "I suppose it's like pro football. The quar-

Continued on Page 31, Column 1

Faculty Pension Funds in the Stock Market



SOURCE: COLLEGE RETIREMENT EQUITIES FUND

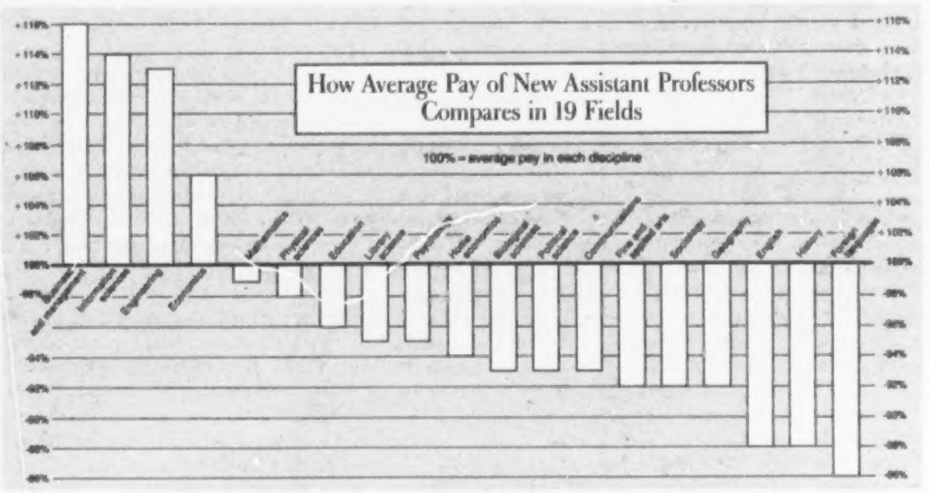
Pension funds invested in common stocks by the College Retirement Equities Fund showed a total return (changes in market value, plus dividends) of 3.5 per cent during the 12 months ending August 31. The value of one unit (share) for August was $47.05.

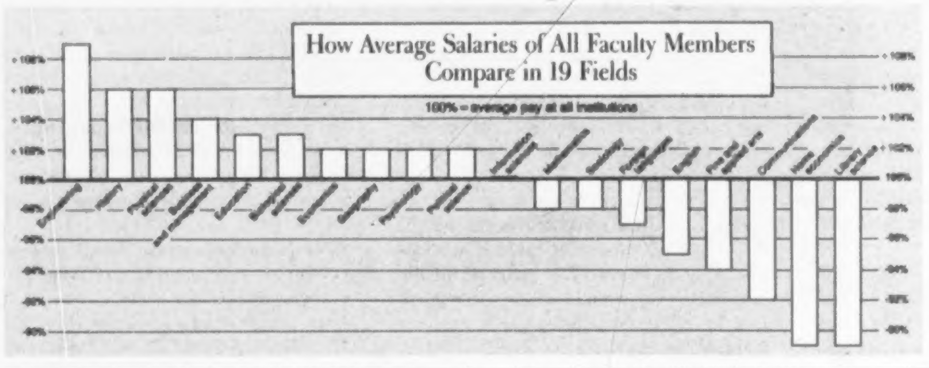
Faculty Salaries by Discipline and Rank

Average pay for more than 39,000 faculty members at 204 state colleges and universities in 1981-82

	Professor	Associate professor	Assistant professor	New assistant professor	Instructor	All ranks
Biological sciences	$30,129	$24,378	$20,219	$18,418	$16,110	$25,591
Business and management	32,841	27,313	22,755	22,972	17,621	25,792
Communications	30,296	24,477	20,031	18,346	16,226	22,934
Computer and information sciences	31,846	27,063	22,713	22,454	17,867	24,840
Economics	31,215	25,790	21,219	20,971	17,471	25,256
Education	30,157	24,992	21,033	18,898	17,442	25,571
Special education	29,863	24,488	20,764	18,886	16,629	24,186
Vocational and technical education	30,289	24,713	20,895	19,862	16,982	23,949
Engineering	32,835	26,918	22,427	22,331	17,465	27,181
English	30,239	23,958	19,868	17,360	14,838	23,541
Fine and applied arts	29,519	23,795	19,630	18,101	16,542	23,394
Foreign languages	30,146	24,402	20,098	17,083	16,326	24,118
Geography	30,651	24,800	20,519	18,092	17,445	25,481
History	30,593	24,316	20,321	17,394	16,820	26,430
Home economics	30,503	24,377	20,610	18,614	16,358	22,244
Library science	30,112	24,136	20,041	18,798	15,918	22,037
Mathematics	30,561	25,018	20,765	19,627	15,574	24,434
Physical sciences	30,822	25,106	20,398	19,282	16,046	26,457
Psychology	31,015	24,556	19,905	18,729	16,306	25,438
Political science and government	30,944	24,614	19,839	18,402	16,940	25,271
Sociology	30,958	24,612	20,116	18,212	16,374	24,319
All disciplines	**$30,739**	**$24,959**	**$20,708**	**$19,770**	**$16,500**	**$24,870**

SOURCE: AMERICAN ASSOCIATION OF STATE COLLEGES AND UNIVERSITIES AND COLLEGE AND UNIVERSITY PERSONNEL ASSOCIATION


How Average Pay of New Assistant Professors Compares in 19 Fields


How Average Salaries of All Faculty Members Compare in 19 Fields

Professors' Pay

Continued from Page 29

terback is going to get more than the middle linebacker."

He says he expects the survey to be controversial.

Irving J. Spitzberg, Jr., general secretary of the A.A.U.P., says his organization does not object in principle to doing a survey by discipline and rank. But "technical questions" have been raised by some of his colleagues about whether such surveys can be done accurately and with enough "sophistication," he says.

At Appalachian State University, Richard D. Howe, professor of history and higher education and director of the national pilot study, says officials have been "very surprised" to learn that their new assistant professors are earning $500 to $1,000 more than those at other institutions in most of the surveyed disciplines.

Those findings do not mean that Appalachian State will cut back on salaries, Mr. Howe says. "We'll just bask in the reflected glory of the data."

Among other national organizations of colleges and universities, the state-college project has aroused "exceptional interest" in joining a proposed expansion of the survey within the next few months, according to Stephen S. Miller, executive director of the College and University Personnel Association.

The statistical base of the pilot survey—more than 39,000 faculty members at 204 institutions—could be increased to more than 200,000 faculty members at some 1,600 institutions, public and private, he says.

The state-college study is the first of its kind by a national association of colleges, although selective surveys of salaries by discipline and rank have been conducted among state universities and land-grant colleges in recent years by researchers at Oklahoma State University.

Copies of the state-college survey's results are available from CUPA, 11 Dupont Circle, Suite 120, Washington 20036. The price is $5 for people whose colleges are members of the state-college group, and $10 for others. —ROBERT L. JACOBSON

The Foundation for Public Relations Research and Education

ANNOUNCES $2,500 GRANTS

for the development of three proposals in the area of public relations research. Candidates must have relevant experience and education to be eligible. Proposals will range from 6 to 12 pages and will be circulated to corporations for funding of $50,000 to $100,000.

Proposals, in brief, are as follows:

1) Development of a pilot public relations curriculum unit for advanced management courses in graduate schools of business, government, and the social services.
2) Development of a pilot program modeling how public relations practitioners can use modern communications technology and available opinion research to communicate better with major publics on trends and issues affecting society and American institutions.
3) Development of a model for professional development programs aimed at senior level public relations practitioners.

Interested researchers should write for application guidelines. Please specify by number which project you are interested in.

Proposal grants will be awarded by December 15. Submit grant applications by November 15 to:

Kalman B. Druck, APR, Chairman
Grants & Proposals Committee
Foundation for Public Relations
Research and Education, Inc.
415 Lexington Avenue, Suite 1305
New York, New York 10017
(212) 370-9353

THE NATIONAL STUDY ON OCCUPATIONAL LITERACY

THE O.L.E.

The Occupational Literacy Exam (O.L.E.) is a Socratic tool designed to test one's vocational health. The O.L.E. helps people determine whether or not they are adequately prepared to make important career life decisions. Advisors use the test to motivate people to spend more directed time in preparing for the 80,000 hours of their career life.

O.L.E. BEGINNINGS:

"The level of occupational literacy among people who will ultimately spend an average of 80,000 hours working—and in many cases hating their jobs—is appalling, says Watkins.

Watkins, however, discovered an answer to occupational illiteracy while looking for a way to interest students in the future without having to entrap them with disco-dancing lessons. Why not apply the Socratic method of asking questions aimed not so much at specific answers but in a more general sense at illuminating where to look further? Watkins' discovery was the root of a booklet called the Watkins Occupational Literacy Examination."

Los Angeles Times, December 6, 1979

"John Holland of Johns Hopkins University in Baltimore, an authority in the vocational testing field, says the examination is 'unique'. It is a very useful idea for stimulating a person to do more work on vocational planning, says Holland."

(AP) Syracuse, NY, Herald American, November 22, 1979

THE NATIONAL STUDY:

The O.L.E. has now been taken by over 100,000 people in the past year and a half alone. The National Study will provide us with an on going assessment of America's occupational health and will provide participating career life advisors an opportunity to test the value of their assistance by using the O.L.E. as a pre and post test measurement of growth.

Point Loma Department Chairpersons, Dr. Dwayne Little (History) and Dr. Bill Hobbs (Math), use the O.L.E. in their advising sessions and have agreed to be responsible for conducting the national research project.

_____ Please send me 100 copies of the O.L.E. and bill me $40 to cover the materials, postage and handling costs. If the O.L.E. does not meet my needs, I will return the material and pay only the postage.

_____ Please tell me how I can become involved in the National Study on Occupational Literacy.

Name _____
Title _____
College _____
Address _____
_____
_____ Zip _____

Send inquiries to:
National Center for Career Life Advising
106 Four Seasons Center—Suite 104 B
Chesterfield, MO 63017
(314/469-7404)

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E CHRONICLE

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News Summary

Articles on inside pages

For the second time this year, the Supreme Court has refused to intervene in a case involving the confidentiality of tenure decisions. Story on Page 25.

Uncertainties remain about the possible effects of a recent court ruling concerning equal pension benefits for men and women. Story and the text of the decision on Page 26.

A sex-neutral pension plan, believed to be the first of its kind, has been put into effect at the University of Minnesota. Story on Page 25.

To students and others at the University of Notre Dame, where he has been president for 30 years, the Rev. Theodore M. Hesburgh has become the stuff of legend. Story on Page 4.

Dental schools, having largely met the country's need for practicing dentists, are being forced to cut back. Story on Page 8.

Graduate-school deans disagree sharply on the merits of a new survey of graduate programs in mathematics and science. Story on Page 14.

The Supreme Court has agreed to decide the constitutionality of a Minnesota tuition-tax-credit law. Story on Page 15.

Women's sports teams in the National Collegiate Athletic Association could be subject to the group's enforcement procedures as early as 1983. Story on Page 17.

In West Germany, the new government says it intends to replace the present system of student grants with loans. Story on Page 19.

The wife of a California professor who has been missing in Indonesia for four months is pressing for an intensified investigation. Story on Page 19.

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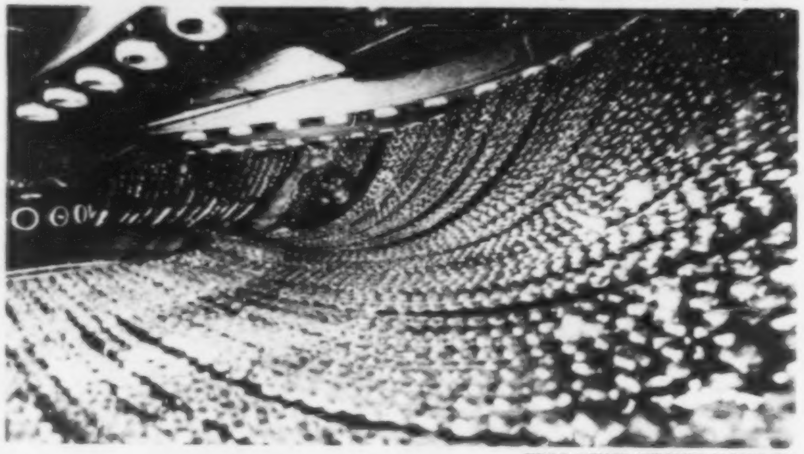
FURBISHING IN HIGH PLACES

JOE WRINN, HARVARD UNIVERSITY

Workers paint on high at Harvard University's Widener Library . . .



CHRIS T. QUILLEN, UNIVERSITY OF ROCHESTER

. . . while one of 563 bulbs is changed during the annual cleaning of a chandelier at the University of Rochester's Eastman School of Music.

Universities Urged to Reassert Their Right to Govern Themselves

By MALCOLM G. SCULLY

Academic leaders must reassert the right of colleges and universities to govern themselves, a report from the Carnegie Foundation for the Advancement of Teaching urged last week.

"The ever-increasing role of outside agencies in campus matters is gradually wearing down internal governance structures," the foundation said. "As leadership is diminished, power and initiative flow even more rapidly to bureaucracies outside.

"This destructive cycle must be ended. The governance initiative must be returned where it belongs: to the campus itself."

In a report entitled *The Control of the Campus*, the foundation said that trustees, administrators, and faculty members must re-establish their proper roles in governing the campuses.

"Today, there is a paucity of thoughtful debate about academic governance," it said. "If the larger interests of the institutions are to be served, and if the public is to be assured that the academy can manage its own affairs, that debate must become vigorous and more vital."

What is required, the foundation said, "is no less than a rebirth of leadership in higher education." The foundation made a

Continued on Page 10, Column 2

White Students Score Highest on SAT Exams

New report shows link to family-income level

NEW YORK

For the first time, the College Board has published statistics detailing the performance of members of racial and ethnic groups on the Scholastic Aptitude Test.

The statistics, released here last week, show that white students generally scored considerably higher than minority-group members. The statistics also point to a significant relationship between a student's score on the S.A.T. and several other factors—including his family's income and his parents' level of education.

The figures in the board's report are for students who graduated from high school in 1981. In that year, the average S.A.T. scores for all students—on a scale that runs from 200 to 800—were 424 on the verbal section and 466 on the mathematics section.

Difference Exceeds 100 Points

However, white students averaged 442 on the verbal section and 483 on the mathematics section, while black students averaged 332 and 362—a difference of over 100 points on each test.

According to information provided by the students, the median family income for whites taking the test was $26,300, more than double the median of $12,500 for blacks. White students reported an average of 14.2 years of education for their fathers and 13.4 years for their mothers, while black students reported averages of 12.2 years and 12.4 years.

Among other minority groups, only Puerto Rican students reported a lower median family income—$12,300—and less parental education than did blacks. Puerto Rican students averaged 361 and 396 on the test, however, somewhat better than black students.

"Asian/Pacific-American" students, the largest minority group after blacks, averaged 397 on the verbal section of the S.A.T. and 513—or 47 points above the national mean—on the mathematics section. They reported a median family income—

Continued on Page 14, Column 1

'Silent Generation': a Revisionist View

Traditional views of 1950's America are "nonsense," says Jeffery Hart in a new book. The Dartmouth professor calls the decade "a golden era" of prosperity and cultural achievements—and of sports heroes, including Mickey Mantle, right.

An article about Jeffery Hart's "When the Going Was Good!" begins on Page 21.

MARGINALIA

Here's another "personalized" letter ground out by a computer—this one from World Book Encyclopedia and addressed to Central Receiving, Babson College.

"FREE BOOK reserved for the Receiving Family," says the teaser on the envelope.

•

Notice posted in a classroom building at Siena College:

ATTENTION PSYCHOLOGY MAJORS
Meet the Faculty
Lear about Career Opportunities

•

More college and university mergers—these suggested by Knox College's Bruce Strom:

If the University of Nebraska–Lincoln merged with Eisenhower College and Lycoming College, you'd have UNL-ike-ly University.

And if Hardin-Simmons University merged with Knox College, you'd have the School of Hard Knox.

And if Ohio University merged consecutively with Cisco Junior College, Ohio State University, and Pennco Tech, you'd have Oh, Cisco, Oh, Pennco University.

And if the Universities of Tennessee and Pennsylvania merged with Bowling Green State and Alice Lloyd College, you'd have Tenn Penn Bowling Alice University.

•

Reports *Memo to the President*, a newsletter of the American Association of State Colleges and Universities: "The National Governors' Association (NGA) met recently in the secluded environment of Shagri La, a rural resort in Oklahoma."

That's somewhere near the university at Norma?

•

The good ol' days (from the *Harvard Engineering Journal*, 1904, reprinted this fall by the *Harvard Gazette*):

"In the discussion of the [grand]-stands for athletic purposes, the minds of many good friends of the University have been made uneasy at the thought of giving outdoor sports a more permanent form and one which seemed to offer to the public an annual spectacle out of proportion in a great seat of learning."

•

From the Richmond *Times-Dispatch:*

"FARMVILLE—The Longwood College board of visitors met in executive session Friday. . . .

"The board of visitors announced approval of the hiring of Dr. Edmond C. Conway of Highland, N.Y., as the dean of faculty. . . . He will provide leadership for Longwood's 15 academic departments. He will be responsible for recruiting and detention of faculty. . . ."

Somebody has to do it. —C.G.

In Brief

U. of New Haven Abandons Merger with Bridgeport

The University of New Haven has decided against merging with the University of Bridgeport, bringing to an end a yearlong discussion between the two private institutions about forming a new university in southern Connecticut.

In announcing the decision, President Philip Kaplan said New Haven had concluded that "Bridgeport's vision of the new university differed greatly from our own and that further merger discussions would not be fruitful."

Earlier this year the University of Bridgeport had turned down the recommendation of a special commission that the two institutions merge immediately. It said that the commission's report did not provide sufficient information about the proposed institution.

24 Arrested in Walkout by Stanford Workers

Negotiations have resumed in a four-week-old strike of service workers at Stanford University, where 24 people have been arrested for vandalism, unlawful assembly, and blocking entrances to campus construction sites.

Those arrested include Michael Baratz, executive secretary of the 1,350-member United Stanford Workers, Local 715 of the Service Employees International Union (A.F.L.-C.I.O.), which is on strike in a dispute over wages.

The walkout has cut the operations of student cafeterias by two-thirds and has curtailed some deliveries.

Harriman Gives $1-Million for Soviet Studies at Columbia

RICHARD W. LINFIELD

W. Averell Harriman, above, former U.S. Ambassador to the Soviet Union and a former governor of New York, has donated $1-million to the Russian Institute at Columbia University.

The institute will be renamed the W. Averell Harriman Institute for the Advanced Study of the Soviet Union.

Details of the gift are to be announced October 21 by the university.

Mr. Harriman, who was Ambassador to Moscow from 1943 to 1946, reportedly has been concerned by widespread reports that the quality and quantity of American scholarship on the Soviet Union has been declining in recent years.

Alumni Groups in Idaho Unite in Lobbying Effort

The alumni associations of two universities and one state college in Idaho have joined forces to lobby the state legislature for more money for higher education.

Alumni from Boise State University, the University of Idaho, and Lewis-Clark State College formed the coalition in response to recent cuts in state support.

"We feel we all have the same needs," said Shirley Strom, president of the University of Idaho Alumni Association. "We can't pull for one school without pulling for each other."

New Jersey College Ordered to Reinstate 2 Professors

New Jersey's chancellor of higher education has ordered Atlantic Community College to reinstate two tenured faculty members who were laid off after the college claimed financial exigency in 1980.

In reviewing a decision by the college trustees, Chancellor T. Edward Hollander found that the college was "in error" when it dismissed the two professors without giving them an opportunity to teach other courses for which they were qualified.

Originally, 11 laid-off faculty members had challenged the college's action on the grounds that the trustees had insufficient cause to claim financial exigency and that the professors were laid off improperly. Four professors were reinstated earlier this year. The chancellor ruled that the remaining five could be dismissed.

AAUP to Investigate Firing of West Chester President

The American Association of University Professors has named an *ad hoc* committee to investigate the controversial firing of Charles G. Mayo from the presidency of West Chester State College.

Mr. Mayo was dismissed on August 20 by Pennsylvania Gov. Richard L. Thornburgh. Charges and countercharges have been leveled concerning both Mr. Mayo's administrative abilities and the possibility that he was fired for political reasons. The A.A.U.P., in a letter to the acting president of the college, said the governor's action "raises significant issues relating to standards of academic government as generally accepted in American higher education."

State Probes Phone Contract at Long Beach Campus

The California Attorney General's office is investigating alleged irregularities in a contract for a $5.8-million telephone system at

Public Backs College Education in Poll

WASHINGTON

Higher education has broad support among the general public, a national opinion survey has found.

A majority of the adult Americans responding to the survey said they did not think a high-school education was enough. To get a job, they said, one must have a college education. They rated the quality of higher education in the U.S. as good to excellent, and said that all young people with the ability and desire for higher education should have a chance at it.

But a majority of the adults who were planning to send their children to college—54 per cent—were worried that they might not have enough money.

Only 11 per cent were confident they would have enough money to pay their children's college bills, while 35 said they were concerned but probably would be able to manage.

An important reason that people don't go to college, according to those surveyed, is that it is too expensive. Besides, they said, during an economic recession, college graduates are just as likely as anyone else to be out of a job.

The survey, the results of which were made public last week, was sponsored by 11 higher-education associations based in Washington and New York. It was conducted by Group Attitudes Corporation of New York.

Interviewers gathered information from nearly 1,200 people aged 18 or older, in a stratified sample representative of the U.S. adult population.

Results of segments of the survey announced earlier (*The Chronicle*, September 29) showed that a majority of those surveyed favored continuing federally financed programs to aid higher education. Only 15 per cent favored drastic cuts in such programs.

More than two-thirds of the people rated the quality of U.S. higher education as good or excellent.

More than a third of those surveyed said they believed the quality of higher education was improving. Fewer than 4 per cent rated the quality as poor, and 23.6 per cent said they thought it was declining.

The organizations that sponsored the survey are: the American Association of Collegiate Registrars and Admissions Officers, the American Association of State Colleges and Universities, the American Association of University Professors, the American Council on Education, the Association of American Colleges, the Association of Governing Boards of Universities and Colleges, the Council for Advancement and Support of Education, the Council for Financial Aid to Education, the Council of Independent Colleges, the National Association of College and University Business Officers, and the National Association of Independent Colleges and Universities.

Copies of the report, *American Attitudes Toward Higher Education*, are available for $14 each from CASE Publications Order Department, Box 298, Alexandria, Va. 22313.

Proportion of people surveyed who found these reasons for going to college 'very important':

To meet educational needs not fulfilled by high school	62.5%
To get a job	59.1%
To prepare for graduate studies	58.8%
To use scholarship and other financial aid	42.6%
To get a basic, general education	35.3%
To get prestige	35.2%
To meet the expectations of society	29.1%
To follow the pattern of friends and relatives	25.3%
To learn to get along with different kinds of people	23.0%
To develop moral and ethical standards	20.8%

Proportion of people surveyed who found these reasons for not going to college 'very important':

College is too expensive	69.6%
There are alternatives, such as on-the-job training programs and technical or special schools	64.3%
They don't like school and don't want to continue their education after high school	51.2%
They prefer to work for a while before going to college	39.4%
People should not go to college unless they know exactly what they want to study	31.6%
A high-school education is all they need to get a job	24.9%
A college education is inadequate preparation for a job	23.7%

Proportion of people surveyed who reacted 'very positively' to these aspects of higher education:

	College graduates	No college education
Pursuit of academic excellence	48.9%	27.2%
Academic freedom	32.4%	25.4%
Free inquiry into controversial ideas	34.2%	14.2%
Public programs in performing arts	22.3%	14.0%
Big-time university athletics	10.0%	34.5%

Proportion of people surveyed who agreed that a college-educated person is:

	College graduates	No college education
More likely to be a leader in the community	88.5%	66.9%
More likely to be self-supporting	72.4%	64.6%
More likely to be a law-abiding citizen	55.0%	39.8%
As likely as anyone to be unemployed in a recession	53.4%	66.5%
More likely to have a stable family life	51.5%	36.2%
More likely to pay taxes	48.4%	30.7%
Likely to be less mechanically and technically skilled	32.0%	41.4%

Note: Data are based on interviews with 1,188 people aged 18 or over in a sample representative of the U.S. adult population.

SOURCE: GROUP ATTITUDES CORPORATION

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Student-Body President Indicted for Failing to Register for Draft

CEDAR FALLS, IOWA

Rusty Martin, president of the student government at the University of Northern Iowa here, was indicted by a federal grand jury last week on a charge of failing to register for the draft.

Mr. Martin, who burned his registration papers during an anti-draft demonstration in 1980, and who was elected to office on an anti-draft platform, became the twelfth man to be charged with failing to register for the draft. Under a law signed by President Carter in 1980, men born in 1960 and after are required to register within 30 days of their eighteenth birthday.

Mr. Martin said the Reagan Administration was "using this law to go after their opponents." His defense, he said, would claim that the Justice Department is selectively prosecuting those who have not registered. About 500,000 men have failed to register, according to the Selective Service System.

BILL WITT

Rusty Martin on the University of Northern Iowa campus

Another of those the government has chosen to prosecute, Benjamin Sasway, was sentenced last week in San Diego to a 2½-year prison term. Mr. Sasway, a student at Humboldt State University, was convicted in August.

Following sentencing, he was freed on $10,000 bail pending an appeal.

About 200 anti-draft demonstrators marched to the campus of the University of California at Berkeley last week to protest Mr. Sasway's sentence.

The protesters snarled traffic and briefly disrupted operations in an undergraduate library, chanting, "Free Sasway—Jail Reagan" and "One, Two, Three, Four, No Draft, No War." No one was arrested.

Two other men have been convicted since the Justice Department began its prosecutions. They are Enten Eller, a student at Bridgewater College in Virginia, who was ordered to register within three months and to perform 250 hours of community service, and Mark Schmucker, 22, a Mennonite who said that registering would violate his religious beliefs. He was convicted last week in Cleveland but has not yet been sentenced.

California State University at Long Beach, including charges that two state employees received gifts and favors from the company that won the contract.

One of the employees has been suspended for 15 days without pay and the other has gone to work for the company—C.I. Communications, Inc., of Encino, Cal.

There have also been charges that competitive-bidding rules were violated and that the communications manager for the state university system and several Long Beach campus officials were flown to Canada by C.I. Communications to inspect the telephone system at the offices of the manufacturer—Mitel Corporation.

Daniel Boatwright, chairman of a state senate committee that held hearings on the charges, said the contract was illegal and should be canceled.

9 Fired Instructors Sue Miles College

Nine former faculty members have sued Miles College in Alabama for breach of contract for dismissing them on only six weeks' notice.

The faculty members claim that, according to the faculty handbook, they should have been given a full year's notice. They were part of a group of 18 fired last spring in what their letters of dismissal said was an effort to stabilize the college's poor financial position. Several of those dismissed had tenure at Miles, a predominantly black institution affiliated with the Christian Methodist Episcopal Church.

Hewlett-Packard to Provide $6-Million for Engineering

The Hewlett-Packard Company plans to provide $6-million over the next eight years to encourage graduate students in computer science and engineering to obtain doctoral degrees and become full-time faculty members.

Under the program, which will be coordinated by the American Electronics Association, Hewlett-Packard will give grants to selected graduate students who intend to pursue academic careers. Other students will be offered loans, which will be forgiven after they have taught for three years.

Hewlett-Packard said it planned to support 50 doctoral candidates, at an average cost of $120,000 per student, by 1985.

The company will also give $50,000 for instructional equipment to each university where a participant elects to teach.

Faculty Threatens Strike at 2 Minnesota Campuses

The University of Minnesota has notified all students, faculty members, and other employees on the Duluth and Waseca campuses that classes for the fall quarter could be canceled if the faculty union calls a strike. The university said the decision would depend on the length of the strike and the number of faculty members who participated.

The campus affiliate of the National Education Association, which represents about 350 faculty members on the two campuses, has filed notice of intent to strike and could walk out any time after October 15, the end of a "cooling-off period" required by state law.

For the last 21 months, the board of regents and the faculty have been negotiating their first collective-bargaining agreement.

Judge Bars Use of Union Dues for Some Types of Lobbying

A federal judge in New Jersey has ruled it unconstitutional for a public employees' union to use dues for lobbying activities other than those involving collective-bargaining contracts.

U.S. District Court Judge Dickenson Debevoise sided with 13 Rutgers University faculty members and 10 public-school teachers, who said that dues they were forced to pay, even though they weren't union members, were used for lobbying with which they didn't agree.

Rutgers faculty members pay dues to the American Association of University Professors.

Harvey M. Lesser, a former president of the local A.A.U.P. chapter, said that the judge's decision "will hamper our efforts to influence the state legislature in passing progressive labor laws."

He added, "I think we'll have to work it out and I think we will work it out," perhaps by requiring that only dues paid by union members be spent on lobbying.

Correction

A report on faculty salaries in *The Chronicle*, September 1, included incorrect data for several institutions. Also, a few institutions reported their information too late to be included in that issue.

The following table, showing average faculty salaries in hundreds of dollars, corrects previously published data for the listed institutions.

	Prof	Assoc prof	Asst prof	Inst
ALABAMA				
U of Alabama, I Birmingham	32.3	25.0	19.5	15.6
DISTRICT OF COLUMBIA				
Trinity C, IIA	30.9	23.6	18.7	14.6
GEORGIA				
Atlanta C of Art, IV				17.7
ILLINOIS				
DePaul U, IIA	35.1	28.0	22.6	18.0
MARYLAND				
St John's C, IV				20.0
MICHIGAN				
Concordia C, IIB	24.0	22.5	17.5	15.1
OHIO				
Denison U, IIB	29.7	24.1	18.7	16.3
OREGON				
Linfield C, IIA	29.0	22.3	18.0	
PENNSYLVANIA				
Temple U, I	35.3	27.5	21.8	16.4
TENNESSEE				
Tenn Wesleyan C, IIB	14.8	—	11.8	11.8
UTAH				
Westminster C, IIB	20.9	17.4	16.0	13.5
VIRGINIA				
U of Virginia Clinch Valley C, IIB	26.4	20.0	16.0	

The faculty salary figures below are additions to those reported in the September 1 issue of *The Chronicle*:

	Prof	Assoc prof	Asst prof	Inst
MASSACHUSETTS				
Brandeis U, I	41.2	29.4	21.4	17.2
Northeastern U, I	37.0	29.4	22.0	17.6
NEW JERSEY				
Rutgers U, I	44.1	30.4	22.0	17.8

Overhaul Sought for Education in Electrical Engineering

By E. PATRICK McQUAID

CAMBRIDGE, MASS.

A team of computer specialists at the Massachusetts Institute of Technology has called for a complete overhaul of electrical-engineering education in the United States.

Because industrial laboratories are producing theoretical knowledge and practical applications faster than they can be effectively studied in the engineering curriculum, the M.I.T. professors said, a lifelong continuing-education program should be mandatory for electrical engineers.

"The crux of the problem facing us is the restructuring of engineering education to disseminate new technological knowledge more widely and at the same rate as it is generated," the authors reported in a 60-page booklet delivered to colleagues at a symposium marking the 100th anniversary of electrical engineering at M.I.T.

"Engineering education must be extended to encompass most of the professional life of engineers, and responsibility for the resulting pattern of engineering education must be shared between academia and industry."

The booklet, *Lifelong Cooperative Education*, is the result of a yearlong survey by Robert M. Fano, Lewis D. Smullin, William M. Siebert, and James D. Bruce, all professors of computer science or electrical engineering.

They proposed that M.I.T. itself establish a Master of Engineering program consisting of two years of part-time study at the institute supplemented by tutorials on the job. That would be followed by a term of full-time study at M.I.T.

The authors also called for:

▶ "Close collaboration between engineering faculties and their industrial colleagues, amounting to joint membership in an 'extended academic community.'"

▶ "An organized collaborative effort by industry and engineering schools to distill significant new knowledge from the current literature, and to digest it and present it for assimilation into the engineering culture."

▶ "Availability, at each workplace, of instruction for updating, broadening, and deepening the knowledge and intellectual skills of engineers."

▶ "Provisions for the routine transfer of academic credits when engineers move to different geographic locations."

The general shortage of engineering faculty members nationwide will probably be the single largest obstacle in mounting the new education program, the authors said.

"The help of industry is urgently needed," they said, "in the form of sabbatical leaves for senior engineers so that they may join us as visiting faculty."

Notes on . . .
Science

Columbia University last week awarded its 1982 Louisa Gross Horwitz Prize to genetic researchers at the Massachusetts Institute of Technology and the Carnegie Institution of Washington.

The $22,000 award, given annually for outstanding research in biology or biochemistry, was shared by Susumu Tonegawa, a professor of cell biology and immunology at M.I.T., and Barbara McClintock, a researcher at the Carnegie Institution's genetics-research unit at Cold Spring Harbor, N.Y.

They were cited for their contributions to understanding the "evolution of genetic information and the control of its expression."

Twelve of the 30 scientists who have won the Horwitz Prize since it was first awarded in 1967 subsequently won a Nobel Prize.

•

Three researchers at Duke University's medical school are spending 45 days in a pressurized chamber that simulates conditions found 2,250 feet below the ocean's surface.

Peter Bennett, a professor of anesthesiology who is directing the project, said its purpose was to study a "high-pressure nervous syndrome," which can cause nausea, tremors, and fatigue in deep-sea divers.

Mr. Bennett said the researchers were gathering information on whether different amounts of nitrogen in the air and slower rates of compression could prevent the syndrome. They will also test a mixture of nitrogen, oxygen, and helium developed by Duke to prevent the syndrome.

The three men will take seven days to "travel," under gradually increasing pressure, to a simulated depth of 2,250 feet—matching a world record set at Duke last year. That will be followed by 32 days of gradual decompression, which should be completed next month.

The divers are living in a spherical chamber slightly less than eight feet in diameter, which is located in the university's F. G. Hall Laboratory.

•

Michigan State University has dedicated a new research facility that university officials say contains the world's first operating low-temperature atom smasher.

The $35-million National Superconducting Cyclotron Laboratory on the M.S.U. campus will be supported by the National Science Foundation and the Department of Energy.

Researchers from 20 countries who attended the dedication ceremony said the laboratory should allow scientists to learn more about the physics of subatomic particles by creating powerful collisions between the centers of atoms.

While conventional cyclotrons use huge magnets to accelerate electrically charged particles to speeds near that of light, Michigan State's new cyclotron will be capable of accelerating heavier particles with greater power.

This is because its "superconducting" magnets—cooled to 400 degrees centigrade below zero—can provide more power than conventional magnets.

—KIM McDONALD

Deans Debate Validity of New Survey of Graduate-School Quality

By KAREN J. WINKLER

LINCOLN, NEB.

A study assessing the quality of graduate programs in mathematics and the physical sciences provoked heated discussion at the annual meeting of the Association of Graduate Schools here last week.

Graduate-school deans agreed only on the fact that the study, which includes a survey of the reputation of programs in those fields, is highly controversial.

A report of the findings, published by the National Academy Press, will be followed by four additional reports assessing graduate programs in disciplines in the humanities, the social sciences, the biological sciences, and engineering. The study was sponsored by the American Council of Learned Societies, the American Council on Education, the National Research Council, and the Social Science Research Council.

"From the beginning, there was controversy," said Rose-Marie G. Oster, graduate dean at the University of Maryland at College Park. "We asked, What is quality? Do we measure quality? Do we measure prestige? Do we reward traditional programs at the expense of newer, more innovative ones?"

Dean Oster predicted, "We are just in the beginning of a long discussion of this report."

The validity of the measures used in the study to assess graduate programs was one of the main areas of concern among the deans here. Some said a "reputational survey," which asks faculty members to rate programs, was potentially inaccurate and even unfair, favoring well-known programs and giving credence to gossip about departments.

But Robert M. Bock, dean of the graduate school at the University of Wisconsin at Madison, pointed out that "the majority of the measures used are not reputational. They are based on numerical data."

The survey, he noted, includes such factors as the numbers of faculty members, graduate students, and doctoral recipients in different departments. "That is comparative data not readily available elsewhere," he said.

Even the study's numerical measures are sometimes flawed, said George K. Fraenkel, dean of the graduate school of arts and sciences at Columbia University. For example, he said, "some departments have one or two faculty members who are the best in the world in a department that is not that good. You don't get that in this kind of study," which simply counts the total number of faculty members.

He also charged that "severe financial limitations" compromised the survey. When it was first conceived, it was to have had a $1-million budget, he said, but the survey was carried out with less than $500,000. As a result, the number of programs studied was cut.

Those cuts meant that the study did not cover such disciplines as Asian or Middle Eastern studies. "In this day and age, for a survey like this to be sponsored by the prestigious group it was sponsored by, and not to include the third world is just a crying, crying shame," he said. "The Western orientation is shocking."

Supporters of the survey argued that its benefits outweighed its flaws. The committee planning the study believed that there was "a need to update" a 1969 report by the American Council on Education, said Duane C. Spriestersbach, dean of the graduate college at the University of Iowa.

"There are weaknesses [in the methods used to evaluate programs]," Mr. Boch said, "yet they are better than anything else the committee could find." Another dean said, "You can always find fault with these popularity polls, but the very fact we talk about them so much suggests that they have value in our society."

Many of the conferees here were concerned that the assessment might be misused by reporters, state legislators, or governing boards who might take some of the findings out of context. "We should ask whether the communal good is advanced by publishing data that others might use wrongly," said one dean.

"What do you tell reporters back home? That is bothering us," added Mr. Fraenkel.

FACT-FILE

Average 1981-82 Stipends of Teaching Assistants

Data from 1,093 departments at 25 universities

Department	Beginning (a)	All (b)	Net (c)	Hourly (d)
Aerospace engineering	$4,946	$5,136	$4,433	$ 7.59
Agricultural economics	6,123	6,151	5,659	9.34
Agricultural engineering	5,454	5,608	5,361	9.20
Agronomy	4,922	4,939	4,653	10.58
Anatomy	4,317	4,370	3,356	7.44
Animal science	4,853	4,897	4,330	7.78
Anthropology	4,234	4,286	3,592	6.32
Architecture	4,339	4,509	3,787	7.26
Art	4,378	4,469	3,730	7.23
Astronomy	5,159	5,238	4,624	8.23
Biochemistry	5,315	5,402	4,639	10.54
Biology	4,540	4,602	3,737	7.10
Botany	5,515	5,627	4,706	8.11
Business	4,793	4,882	4,187	6.96
Business administration	4,974	5,011	4,147	7.93
Chemical engineering	5,569	5,580	4,843	8.51
Chemistry	5,487	5,525	4,836	8.66
Civil engineering	5,161	5,359	4,613	7.87
Classics	5,032	5,036	4,051	8.32
Communication	4,933	5,144	4,240	7.28
Computer science	5,328	5,649	4,889	8.42
Curriculum and instruction	4,223	4,307	4,014	6.78
Economics	4,677	4,868	4,205	7.48
Education	4,473	4,597	3,735	6.90
Electrical engineering	5,321	5,527	4,806	8.51
Engineering mechanics	6,508	6,538	5,661	9.82
English	4,878	5,186	4,468	7.50
Entomology	5,205	5,218	4,772	8.41
Food and nutrition	5,120	5,401	4,684	8.60
Forestry	5,211	5,267	4,718	7.37
French	5,175	5,519	4,806	8.57
Geography	5,010	5,104	4,433	7.73
Geology	5,019	4,919	4,169	7.43
German	5,057	5,104	4,225	7.38
Health, physical education, and recreation	4,124	4,124	3,712	6.48
History	4,444	4,654	4,052	7.04
History of art	4,998	5,077	4,096	7.21
Horticulture	4,729	5,126	4,765	7.44
Industrial engineering	5,364	5,489	4,774	8.44
Journalism	5,144	5,177	4,351	7.30
Landscape architecture	5,609	5,516	4,516	8.75
Linguistics	5,076	5,105	4,091	7.69
Mathematics	5,228	5,365	4,757	8.33
Mechanical engineering	4,992	5,223	4,831	8.02
Microbiology	5,053	5,066	4,372	8.59
Music	3,845	3,734	3,430	6.02
Nuclear engineering	4,734	5,176	3,881	8.06
Nursing	3,966	4,006	3,194	6.18
Nutrition	5,102	5,141	4,322	8.17
Pharmacy	4,548	4,612	3,586	6.18
Philosophy	4,455	4,578	4,130	7.59
Physics	5,234	5,309	4,670	8.31
Physics and astronomy	5,500	5,570	5,039	7.87
Physiology	5,684	5,719	4,642	7.75
Plant pathology	4,824	4,928	4,570	8.50
Political science	4,799	4,884	4,146	7.02
Psychology	4,551	4,687	4,041	6.87
Romance languages	4,950	5,070	4,103	8.07
Slavic languages	5,172	5,250	4,204	8.42
Social work	5,126	5,376	4,076	7.50
Sociology	4,797	4,946	4,241	7.49
Spanish	5,500	5,609	4,944	8.98
Statistics	5,004	5,178	4,531	8.07
Theater	4,091	4,258	3,383	6.35
Zoology	5,616	5,725	4,809	8.19

(a) Average stipend offered to beginning graduate teaching assistants
(b) Average stipend for all graduate teaching assitants
(c) Average stipend minus required tuition and fees paid by the students
(d) Average net stipend per hour, based on hours of work required per week, with two 16-week semesters per academic year

SOURCE: HENRY F. HOLTZCLAW, JR., AND RUSSELL C. NELSON, UNIVERSITY OF NEBRASKA, LINCOLN

Scores on SAT Examinations

Continued from Page 1

$21,500—second only to that of white students.

Mexican-American students, who reported a median family income of $17,000, averaged 373 on the verbal section and 415 on the mathematics section. American Indian students, whose families had a median income of $20,100, scored 391 and 425.

The board's report, *Profiles, College-Bound Seniors, 1981*, contains 102 pages of tables that break down students' scores according to a number of factors, including what kind of high-school program the student had been enrolled in, how many years he had studied various subjects, his racial or ethnic background, his family's income, and his plans, if any, for postgraduate study.

Although the board has been collecting such information since 1971, it has declined until now to publish it because of what George H. Hanford, the College Board's president, said was an "honest difference of opinion" between "those who fear that publication of these data will serve to convey a misperception of minority students' ability and those who believe that exposure of the data to public scrutiny will serve better minority interests by demonstrating the need for more affirmative action with respect to access to higher education."

The statistics, he warned, could "lend themselves to misinterpretation by those who seek simple explanations" and could "obscure the fact that a significant number of minority youth score well on the S.A.T."

But, Mr. Hanford added, "we are convinced that the data, to the clear advantage of minority youth, will serve to illuminate the extent and nature of the educational deficit this nation must overcome."

The S.A.T. is taken each year by about one million high-school seniors—the majority of them in Eastern states—seeking admission to colleges and universities.

—LAWRENCE BIEMILLER

Average Scores on Scholastic Aptitude Test, by Group

	Average S.A.T. score		Parents' median income	Median years of education		Average high-school grade	Proportion of students tested *
	Verbal	Math		Father	Mother		
American Indian	391	425	$20,100	13.4	12.5	2.93	0.6%
Black	332	362	12,500	12.2	12.4	2.75	9.0%
Mexican-American	373	415	17,000	12.0	11.8	2.99	1.7%
Asian/Pacific American	397	513	21,500	14.2	12.9	3.16	3.4%
Puerto Rican †	361	396	12,300	11.9	11.8	2.88	0.8%
White	442	483	26,300	14.2	13.4	3.10	81.9%
Other	388	447	18,500	13.7	12.4	2.96	2.2%
Men	430	492	25,100	14.2	13.2	3.00	48%
Women	418	443	23,700	13.9	13.1	3.11	52%
All students	424	466	24,300	14.0	13.1	3.06	100%

* Percentages do not add to 100 because of rounding
† Figure includes only students living in 50 states and District of Columbia

SOURCE: COLLEGE BOARD

49 Pct. of State Colleges Report Freshman Enrollment Is Up

WASHINGTON

A survey of enrollment at state colleges and universities this fall shows an almost even division between those reporting increases and those reporting either decreases or no change from a year ago.

The American Association of State Colleges and Universities last week released preliminary data from 235 of its 354 member institutions.

Over all, 51 per cent of the institutions reported a decrease or no change in their freshman enrollment this fall; 49 per cent reported increases. In total enrollment, about 43 per cent reported decreases, 51 per cent reported increases, and 6 per cent reported no change.

Officials of the association said relatively large decreases in enrollment had been reported by some state colleges in states where the economic recession has been especially severe. Among those states are Michigan, Minnesota, Missouri, Ohio, Oregon, Washington, and Wisconsin.

Reports of declines in enrollment were common also in the New England and Mid-Atlantic states, according to the A.A.S.C.U. data.

States in which most of the institutions reported enrollment increases include Georgia, Illinois, Louisiana, Oklahoma, South Carolina, and Virginia.

Colleges losing enrollment cited a broad variety of causes. Among the most frequently cited were the recession, reduced state appropriations, reduced federal aid to students, and higher tuition rates.

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News Summary

Articles on inside pages

A sharp decrease in the number of Iranians studying in the U.S. has slowed the rate of increase in foreign-student enrollment at American universities. Story on Page 2.

Homosexual academics are more reluctant to reveal their sexual preference than are homosexuals in society at large, said participants in the annual meeting of the Gay Academic Union. Story on Page 9.

A collective-bargaining pact cannot grant one faculty union access to a school's internal mail system and deny it to another, the Supreme Court was told last week. Story on Page 11.

Abuses in college sports would be curbed by more field investigators, not stiffer penalties, say officials of the National Collegiate Athletic Association. Story on Page 15.

Raoul Berger, legal scholar and "iconoclast," argues in his new book that the Supreme Court overstepped its authority in rulings on the death penalty. Story on Page 21.

To win a grant, college faculty and staff members need to submit more than good ideas, foundation officials say. Story and Fact-File on Pages 25-28.

Israeli officials on the occupied West Bank of the Jordan River have suspended a controversial requirement that students from outside the area obtain permits to study there. Story on Page 19.

Attacks on intellectuals preceded the decision of the Polish government to outlaw the independent union, Solidarity. Story on Page 19.

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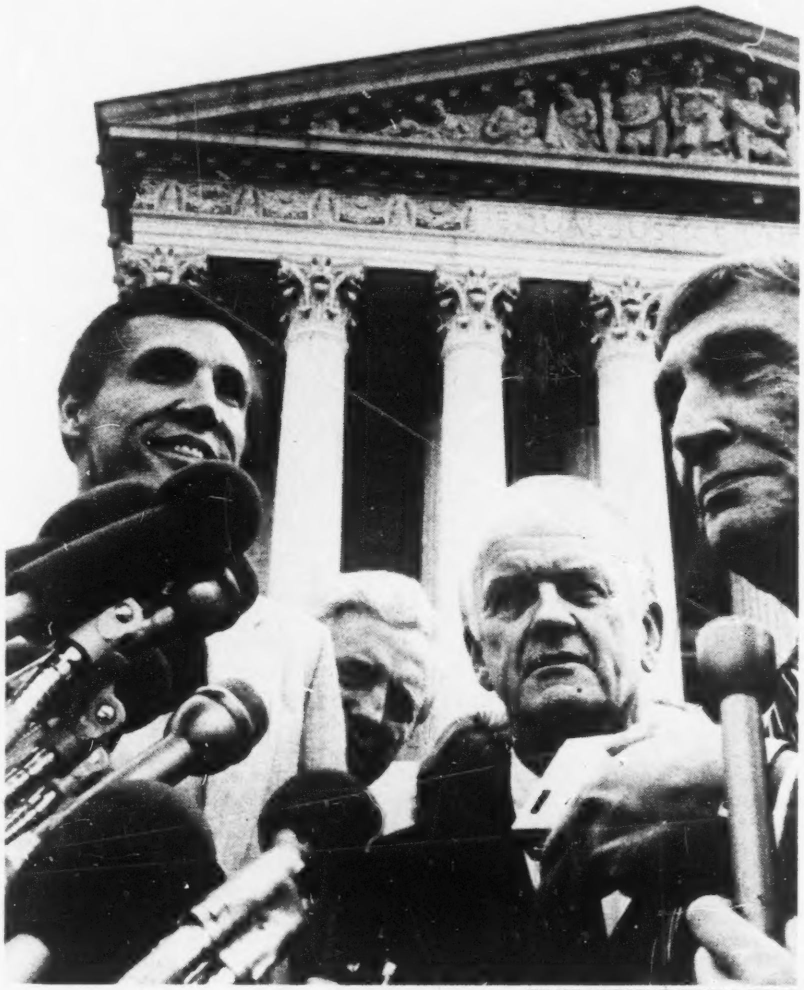
SUPREME COURT HEARS BOB JONES CASE



CHRONICLE PHOTOGRAPH BY JOHN C. PHILLIPS

Bob Jones, III, left, and Bob Jones, Jr., flank William B. Ball, the lawyer for Bob Jones U., following arguments last week at the Supreme Court in a case involving tax exemption for the university. Story on Page 11.

Board Says Minority-Group Scores Helped Push Up Averages on SAT

NEW YORK

The College Board last week attributed much of this year's rise in Scholastic Aptitude Test scores to strong showings by black and other minority-group students.

The national averages rose—for the first time in 19 years—by 2 points on the test's verbal section and 1 point on the mathematics section from 1981 to 1982. At the same time, black students' verbal scores improved by 9 points and their mathematics scores by 4 points.

"When we weighted minority contributions to the score increases this year, it indicated that minorities had played a significant role," a spokesman for the board said.

The scores are for high-school seniors who took the S.A.T. in the 1981-82 school year—this fall's college freshmen.

The board's unexpected decision to release a breakdown of this year's scores by racial and ethnic background—and to credit minority-group students for the much lauded rise in the national S.A.T. average—came just a week after it published a book that included, without analysis, a similar breakdown for 1981.

An examination of average scores over

Continued on Page 10, Column 1

Recession Hits State Support for Colleges

6-pct. increase is smallest in 20 years

By JACK MAGARRELL

In this year of economic recession, the increase in state appropriations for higher education is the smallest in more than 20 years—only 6 per cent above the total for 1981-82.

During the previous 20 years, the yearly increases in state tax funds earmarked for colleges and universities averaged nearly 14 per cent. But now such spending has been caught in the economic slowdown, which has depressed the states' sales- and income-tax collections.

Only twice in the previous two decades has the yearly growth in higher-education appropriations dipped as low as 9 per cent—in 1962-63 and 1976-77.

During higher education's boom years in the late 1960's, the annual increase in support from state tax funds twice reached highs of 25 per cent—in 1965-66 and 1967-68.

Legislatures in two states have actually appropriated less money for colleges and universities than in 1980-81.

In Oregon, with its lumber industry hard hit by the stagnant housing market, higher-education appropriations for this year total $240.5-million, down 4 per cent from the $250.4-million appropriated for 1980-81.

South Dakota, which does not enjoy the rich energy revenues of North Dakota, appropriated $53.5-million for higher education this year, $236,000, or 0.4 per cent, less than was provided two years earlier.

North Dakota—and other states where revenues are strongly supported by the production of oil, gas, and coal—provided substantial increases in support for higher education in the past two years: up 43 per cent in North Dakota, a figure topped only by Alaska's 79 per cent and Oklahoma's 47 per cent. Montana increased appropriations for higher education by 41 per cent; Texas, by 39 per cent; Wyoming, by 38 per cent.

Total state support for higher education

Continued on Page 6, Column 4

Appeals Court Rules that TIAA Benefits Do Not Discriminate Against Women

By CHERYL M. FIELDS

WASHINGTON

The U.S. Court of Appeals for the Sixth Circuit has ruled that the Teachers Insurance and Annuity Association and the College Retirement Equities Fund do not illegally discriminate against women by paying them lower monthly retirement benefits.

The ruling is directly contrary to a decision handed down last month by the U.S. Court of Appeals for the Second Circuit, which ordered the companies to use "unisex mortality tables" in calculating the benefits paid to anyone retiring after May 1, 1980. The Second Circuit, in a case involving Long Island University, ruled that paying women lower monthly pensions violated Title VII of the Civil Rights Act of 1964, which bars discrimination in "compensation, terms, conditions, or privileges of employment."

Tom Edwards, chairman of T.I.A.A. and

Continued on Page 26, Column 4

MARGINALIA

Library officials at J. Sargeant Reynolds Community College are said to be questioning the effectiveness of one of the 691 books for which overdue notices have been sent out—*Memory Made Easy*, borrowed by someone who evidently forgot it was due on March 26, 1981.

■

"When you think about it," wrote John W. Oller, Jr., in *Language Tests at School* (Longman), "conversations are laced with decision points where implicit choices are being constantly made. Questions imply a range of alternatives. Do you want to go get something to eat? Yes or no. How about a hamburger place, or would you rather have something a little more elegant? Which place did you have in mind? Are you speaking to me (or to someone else)? Questions just naturally seem to imply alternatives. Perhaps the alternatives are not usually so well defined as they are in multiple choice tests, and perhaps the implicit alternatives are not usually offered to confuse or trap the person in normal communication though they are explicitly intended for that purpose in multiple choice tests, but in both cases there is the fundamental similarity that alternatives (explicit or implicit) are offered. Pilot asked Jesus, 'What is truth?' "

Only the cabin attendants know, guesses B. J. Dubois of New Mexico State University.

■

The announcement of the appointment of an intern at Brookdale Community College describes his present job thus: "He is a Task Leader involved with Configuration Management of the baseline documentation of command and control message standards which are undergoing testing." Any questions?

■

Don Isaacson, of Green River Community College, isn't chicken about noting that if you merged the University of Rhode Island with the University of Redlands, you would have Rhode Island Red University. Failing that, he says, you might merge Plymouth State College with Slippery Rock State College and . . .

■

The *Daily Guardian* at Wright State University reports that James St. Peter, who works for the student government, wasn't injured in an accident in which he was "the victim of a wreckless driver." Good news all around.

■

Michael S. Pincus, dean of the College of Arts and Sciences at Fairleigh Dickinson University, has received a letter from Wellesley College addressed to the dean of the College of Arts and Crafts. Seems a little snobbish to us. —C.G.

In Brief

Ex-President Found Guilty of Misusing Funds

John H. Snedeker, former president of Western New Mexico University has been found guilty in state court of misusing university funds while president.

Mr. Snedeker, an avid gun collector, was convicted of using the money to buy large quantities of ammunition for his personal use. He was president of the state university from 1962 to 1980, when he resigned shortly before being indicted on the charges. Following his conviction, he was also dismissed as a professor of education.

Mr. Snedeker, who could receive a sentence of up to 22 years, is free on a personal-recognizance bond pending sentencing, which is expected in November. His lawyer said the verdict would be appealed.

Princeton U. Upheld in Plagiarism Case

A New Jersey court of appeals has upheld a lower court's ruling that supported Princeton University's decision to withhold the diploma of a student found guilty of plagiarism.

Gabrielle Napolitano, a senior at Princeton last year, was found guilty of plagiarism by a university committee on discipline and sued the university over its decision to deny her a diploma for one year.

Her request for the right to graduate and for an unspecified sum in compensatory and punitive damages was rejected by Judge William Drier last June.

Service Workers at Stanford End 4-Week Walkout

A four-week strike by service workers at Stanford University has ended with the ratification by union members of a three-year contract.

Members of the United Stanford Workers, Local 715 of the Service Employees International Union (A.F.L.-C.I.O), voted 424 to 100 to accept the contract, which calls for across-the-board increases of 7 per cent the first year and 5 per cent in each of the next two years.

Some employees will also receive an additional 2 to 3 per cent over the three years because of step increases on the salary schedule. In addition, the contract includes a cost-of-living salary adjustment in the third year.

Faculty Seeks to Overturn Choice of New President

The faculty senate at the Community College of Baltimore has asked the board of trustees to rescind the appointment of its chairman, Charles G. Tildon, Jr., as president, charging that the action violated state regulations and the college's affirmative-action plan.

In a resolution, the faculty senate cited a Maryland law stating that "board members may not use their positions on the board for personal material gain." The law also instructs the board to concentrate on policy matters and avoid "concerning itself with administrative detail." The resolution said the appointment of Mr. Tildon "to the paid administrative position of president" violated those provisions.

The resolution also said the appointment, which was made without a presidential search, violated an affirmative-action plan adopted by the trustees in 1980.

Michigan State Sued over 1980 Layoffs

The Michigan Education Association has sued Michigan State University, charging that layoffs ordered by the administration two years ago constituted a breach of contract and of employment and tenure policies.

The suit is a result of the administration's order in December, 1980, that all "nonessential" employees take 2½ days off without pay to help the university, which was undergoing financial difficulties at that time.

Professor Suspended for Leaving Exam

An associate professor of psychology at the University of Southern Maine has been suspended from teaching a psychology course after leaving his classroom during an examination and offering free beer at a local bar to the first 20 students to finish the test.

Donald Sytsma, who was teaching introductory psychology at the Portland campus, said that while his actions were "rather controversial," he had done nothing wrong because there was no university policy requiring him to be present during the examination.

A university official said that Mr. Sytsma had been suspended from only the one course and was continuing to teach several others.

2 Quit at Wisconsin Campus to Protest Alleged Racism

The director of minority affairs at the University of Wisconsin at La Crosse and her assistant have resigned to protest the failure of a minority-group candidate to win a place on the university's five-student homecoming court.

Gretchen C. Lockett, the director, and Pearl Jackson, a program-development specialist in the minority-affairs office, said in a statement that they had acted to call attention to racism on the campus.

After the resignations, the student senate voted to cancel the homecoming festivities, set for last weekend. A later vote allowed the events to take place as planned, but with a new selection

Foreign Enrollment at U.S. Colleges: The Pace Slows

MINNEAPOLIS

The number of foreign students at American colleges and universities increased at a lower rate last year than in any of the previous six years.

In a statement prepared for last week's meeting of the American Council on Education here, Wallace B. Edgerton, president of the New York–based Institute of International Education, attributed the slowdown to a sharp decline in the number of Iranians studying at U.S. institutions.

Over all, the institute's annual census of foreign students found that 326,299 were enrolled at 2,454 American institutions in 1981-82—a 4.6-per-cent increase over 1980-81. The annual rate of increase in the six previous years ranged from 8 to 16 per cent, Mr. Edgerton said.

If the number of foreign students were to increase at the 1981-82 rate throughout the decade, Mr. Edgerton said, there would be 468,000 of them in this country in 1990. In the years in which the number was rising more rapidly, some educators estimated that as many as a million foreign students could be enrolled by the end of the decade. The number of Iranians declined from 47,550 in 1980-81 to 35,860 last academic year.

In 1981-82, they accounted for 11 per cent of all foreign students in the U.S., while in 1979-80—when 51,870 Iranians were enrolled—they accounted for almost 20 per cent.

Mr. Edgerton noted that the number of foreign students from several other members of the Organization of Petroleum Exporting Countries, including Algeria, Libya, and Saudi Arabia, also had gone down. The number of students from Kuwait, however, increased by more than 10 per cent.

"If this pattern continues," he said, "it may indicate that the enormous expansion of foreign-student numbers has reached a plateau in the oil glut of the 1980's—at least as far as the Middle Eastern nations are concerned." However, he said, the number of students from Ecuador, Indonesia, Nigeria, and Venezuela—also members of OPEC—continued to rise.

Mr. Edgerton expressed concern that the "poorest nations" of the world were underrepresented at American colleges and universities.

He said students from 27 third-world countries, including 13 members of OPEC, 9 regional economic powers, and 5 Asian countries, accounted for some 190,000 of the 326,299 foreign students in the United States in 1981-82.

"The remaining 127 nations in the third world sent just 75,000 students—an average of well below 1,000 students per country," his statement said.

The institute's census also showed that:

- ▶ The 326,299 foreign students in 1981-82 represented 2.6 per cent of the total enrollment at American colleges and universities.
- ▶ More foreign students—23 per cent of the total—were studying engineering than any other field. Business and management attracted the next largest number of students.
- ▶ Only about 15 per cent of all foreign students received a significant amount of financial aid from the U.S. government or from their American colleges and universities.

The 10 countries with the most students enrolled at American institutions in 1981-82 were:

Iran	35,860
Taiwan	20,520
Nigeria	19,560
Canada	14,950
Japan	14,020
Venezuela	13,960
India	11,250
Saudi Arabia	10,220
Malaysia	9,420
Hong Kong	8,990

The 10 American institutions with the largest enrollments of foreign students in 1981-82 were:

Miami-Dade C.C.	4,662
U. of Southern California	3,434
Columbia U.	3,103
U. of Wisconsin, Madison	2,519
Boston U.	2,332
U. of Texas, Austin	2,327
Texas Southern U.	2,190
U. of Michigan, Ann Arbor	2,187
U. of California, Los Angeles	2,163
Northeastern U.	2,110

Copies of the institute's report, *Open Doors 1981/82*, will be available after December 1 for $22.95 each from the Office of Communications, Institute of International Education, 809 U.N. Plaza, New York 10017.

—MALCOLM G. SCULLY

'Get Mad,' Mondale Tells Colleges

By KAREN J. WINKLER

MINNEAPOLIS

WIDE WORLD

Walter F. Mondale

"You're all very dignified, and your opponents are not," former Vice-President Walter F. Mondale told university leaders at the annual meeting of the American Council on Education here last week. "Once in a while you ought to get mad."

"There's going to be a brutal, bloody, and disputed fight in this country over priorities—and you are one of the main targets. You had better make the case [for support for higher education] with more vigor than I think the case is being made," he said. "You have to make your case very clearly and unashamedly."

Part of the threat to education today comes from the Reagan Administration's attempts to cut the funds for colleges, universities, and their students, Mr. Mondale said. He cited rumors in Washington that the Office of Management and Budget is going to propose reductions in funds for education in the fiscal 1984 budget that will be "nothing short of radical."

"I never imagined that it would be necessary to explain to the President of the United States the nation's stake in education," he said, but "for the last two years everyone in this room has been struggling to defend our system of education."

"This year, the fight must be waged again—against an Administration that is the most anti-education Administration we've ever had," he said, telling the educators here to work "to reaffirm the federal role in education in the United States" in this year's Congressional elections.

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State Support

Continued from Page 1

this year amounts to more than $24.2-billion, according to M. M. Chambers, professor of education administration at Illinois State University, who has compiled comparable data from the 50 states every year since 1958.

When the 1982-83 appropriations reported by Mr. Chambers are adjusted for the inflation that has occurred during the past two years, half of the states show a decline in support for higher education.

The Labor Department's Consumer Price Index rose 17.4 per cent during the two years ending last June 30. That inflation rate turned a two-year gain of 16 per cent in higher-education appropriations into a 1-per-cent loss in purchasing power.

The impact of inflation is less severe, however, than it was a year ago, when a two-year gain in appropriations of 20 per cent was reduced by an inflation rate of 25.3 per cent to produce a loss of 4 per cent in the purchasing power of state funds for higher education.

Average per Capita Is $106

On a per-capita basis, average state spending for higher education this year is up—to $106.04, compared with last year's average of $101.50. Among the states, per-capita spending ranges from $356.37 in Alaska to $37.66 in New Hampshire, based on the latest Census Bureau estimates of state population in 1981.

Among the states highest in appropriations per capita are Wyoming, with $197.56; Hawaii, $188.70; North Dakota, $164.95; and New Mexico, $138.62.

Those with the lowest per-capita appropriations, after New Hampshire, are Maine, $63.47; New Jersey, $67.27; Massachusetts, $71.44; and Missouri, $72.47.

To allow for state-to-state differences in wealth, the Chambers data were analyzed in terms of higher-education appropriations per $1,000 of personal income. On that basis, the amounts for 1982-3 range from $25.91 in Alaska to $3.77 in New Hampshire.

Other states that rank high in appropriations per $1,000 of personal income are Hawaii, $17.10; Wyoming, $16.94; New Mexico, $16.26; and North Dakota, $16.14.

Other states with low appropriations per $1,000 of personal income are New Jersey, $5.55; Connecticut, $6.29; Massachusetts, $6.42; and Pennsylvania, $7.08.

The national average of higher-education spending per $1,000 of personal income is $10.12, down from last year's average of $10.64.

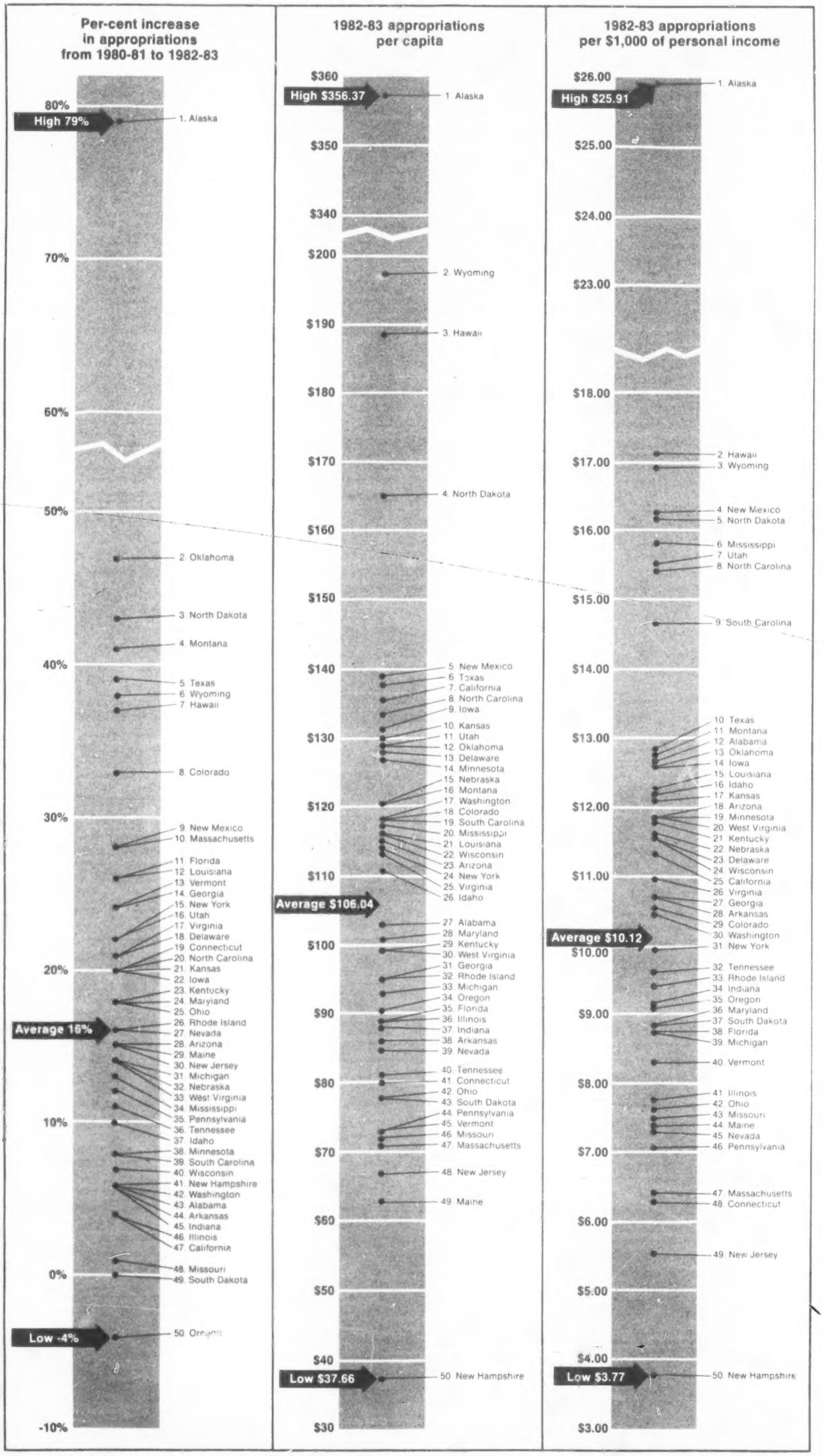
California to Spend $3.2-Billion

More than an eighth of all state tax funds for higher education this year will be spent in California.

The $3.2-billion that California appropriated for colleges and universities is the largest total by far, followed by Texas and New York, each with more than $2-billion. Illinois was fourth, with a little over $1-billion.

Over the past 10 years, according to Mr. Chambers's data, state appropriations for higher education have increased by 185 per cent. The 10-year record, when adjusted for inflation of 132.5 per cent, amounts to a "real" gain of 23 per cent.

Total college enrollment increased by about 38 per cent between the fall of 1971 and the fall of 1981. The National Center for Education Statistics has projected an increase of about 1 per cent in total enrollment this fall.



CHRONICLE CHART BY PETER H. STAFFORD

SOURCES: M. M. CHAMBERS, DEPARTMENT OF COMMERCE

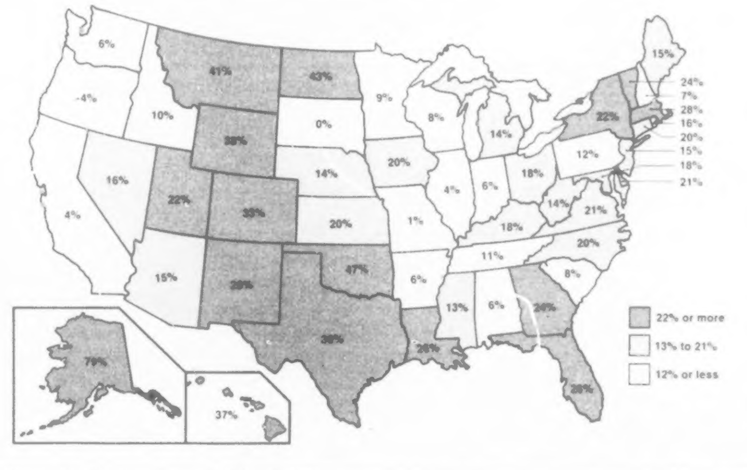
FACT–FILE

State Appropriations for Higher Education in 1982-83 and Changes over 2 Years

The following data were compiled by M. M. Chambers, professor of educational administration at Illinois State University. The full report, including additional footnotes, will be available after November 15 from the National Association of State Universities and Land-Grant Colleges, One Dupont Circle, Washington 20036. The price is $3.50 a copy for non-members.

Annual Appropriations

	Appropriations 1982-83 (add 000)	2-year change
ALABAMA		
U of Alabama		
Birmingham	$ 69,676	+ 1%
Tuscaloosa	46,050	+ 3%
Huntsville	13,368	+11%
Auburn U	71,311	+ 4%
U of South Alabama	25,973	+ 1%
Jacksonville St U	12,376	− 1%
Alabama A&M U	10,002	+ 3%
Troy St U	9,639	+ 8%
Alabama St U	8,525	+ 2%
U of North Alabama	8,219	+ 3%
U of Montevallo	6,475	0%
Livingston U	4,145	+ 6%
Athens St C	1,981	+22%
Community colleges	44,981	+ 1%
Aid to pvt insts	2,485	0%
Student aid	943	0%
Other appropriations*	70,933	0%
Total	**$ 407,082**	**+ 6%**
ALASKA		
U of Alaska		
Fairbanks	$ 54,975	n/c
Anchorage	18,954	+64%
Juneau	8,662	+84%
Community colleges	44,519	+111%
Other appropriations	19,716	n/c
Total	**$ 146,826**	**+79%**
ARIZONA		
U of Arizona	$ 140,128	+13%
Arizona St U	99,140	+24%
Northern Arizona U	37,235	+32%
Community colleges	42,362	− 4%
Other appropriations	3,660	n/c
Total	**$ 322,525**	**+15%**
ARKANSAS		
U of Arkansas	$ 124,855	n/c
Arkansas St U	20,215	+ 9%
U of Central Arkansas	12,763	+ 1%
Southern Arkansas U	7,954	+ 7%
Arkansas Tech U	7,291	+14%
Henderson St U	6,746	− 6%
Community colleges	14,344	+ 9%
Student aid	2,376	+52%
Other appropriations	1,546	+54%
Total	**$ 198,090**	**+ 6%**
CALIFORNIA		
U of California	$ 1,150,468	+11%
Cal St U & Colls		
San Diego	89,138	+10%
Long Beach	78,251	+ 6%
San Jose	69,978	+ 5%
Northridge	68,351	+ 6%
San Francisco	64,567	+ 5%
Los Angeles	63,294	+ 4%
San Luis Obispo	62,302	+ 7%
Sacramento	61,744	+ 7%
Fullerton	56,790	+ 9%
Fresno	55,187	+10%
Pomona	54,190	+13%
Chico	50,318	+ 9%
Hayward	40,890	+11%
Humboldt	33,899	+ 9%
Dominguez Hills	26,041	+16%
Sonoma	23,264	+ 8%
San Bernardino	19,205	+19%
Stanislaus	16,751	+16%
Bakersfield	15,528	+ 7%
Hastings C of Law	7,175	+ 6%
Cal Maritime Academy	3,451	+ 8%
Community colleges	1,068,626	− 2%
Student aid	82,369	− 1%
Postsecondary Ed Commission	2,532	+20%
Other appropriations	10,556	n/c
Total	**$ 3,274,865**	**+ 4%**
COLORADO		
U of Colorado	$ 127,905	+63%
St Bd of Ag (for Colorado St U, U of Southern Colo, and Ft. Lewis C)	65,777	n/c
U of Northern Colo	21,856	+20%
COLORADO—Continued		
Colo Sch of Mines	8,570	+18%
State colleges (Mesa, Metropolitan, Western, and Adams St)	33,821	+56%
Aid to state comm colls	37,659	+40%
Aid to dist comm colls	9,824	+40%
Occupational ed	20,729	+14%
Student aid	19,317	+71%
Veterans' tuition aid	434	−50%
Other appropriations	4,128	n/c
Total	**$ 305,020**	**+33%**
CONNECTICUT		
U of Connecticut	$ 113,182	+16%
State colleges	51,919	+21%
Higher Ed Ctr	1,867	+56%
Aid to regional comm colleges	30,862	+14%
Aid to state tech colleges	9,418	+ 12%
Other appropriations*	45,360	+42%
Total	**$ 252,608**	**+20%**
DELAWARE		
U of Delaware	$ 45,048	n/c
Del Tech and Comm Coll	18,681	+23%
Delaware St C	11,113	+28%
Delaware Inst of Med Ed and Research	1,362	+ 9%
Delaware Inst Veterinary Med Ed	164	+56%
Other appropriations	532	+12%
Total	**$ 76,900**	**+21%**
FLORIDA		
U of Florida	$ 223,622	+21%
U of South Florida	97,686	+39%
Florida St U	85,098	+28%
Florida International U	37,743	+32%
U of Central Florida	36,037	+33%
Florida Atlantic U	28,953	+48%
Florida A&M U	22,509	+25%
U of West Florida	18,839	+17%
U of North Florida	14,933	+23%
U of Miami Med Sch	8,364	+28%
U of Miami Nurs Prog	200	−37%
U of Miami Elec Eng	270	n/c
Florida Inst of Tech	248	n/c
Barry C, Social Work	214	+45%
Southeast C Osteopath Med	200	n/c
Community colleges	296,337	+22%
Student aid	19,895	n/c
Other appropriations	14,648	+31%
Total	**$ 905,796**	**+26%**
GEORGIA		
U of Georgia	$ 147,799	+24%
Medical C of Georgia	67,097	+19%
Georgia St U	55,593	+25%
Georgia Inst of Tech	45,803	+26%
State colleges		
Georgia Southern	14,660	+22%
West Georgia	12,544	+19%
Valdosta	10,106	+26%
GEORGIA—Continued		
State colleges—Continued		
Columbus	9,550	+21%
Fort Valley	7,524	+26%
Savannah	7,280	+17%
Georgia	6,849	+21%
Augusta	6,829	+19%
Albany	6,828	+19%
Kennesaw	6,237	+27%
Armstrong	6,197	+22%
Georgia Southwestern	6,007	+19%
Southern Tech Inst	4,884	+25%
North Georgia	4,541	+22%
Aid to st comm colls	40,768	+21%
Aid to Dekalb CC	6,137	n/c
Student aid	748	+ 8%
Other appropriations	60,238	n/c
Total	**$ 534,219**	**+24%**
HAWAII		
U of Hawaii	$ 148,276	+22%
Other appropriations*	51,988	+83%
Less tuition and other revenue	15,150	
Total	**$ 185,114**	**+37%**
IDAHO		
U of Idaho	$ 41,477	+14%
Boise St U	20,721	+11%
Idaho St U	19,916	+ 9%
Lewis-Clark St C	2,839	7%
Community colleges*	4,889	+ 8%
Student aid	274	10%
Other appropriations	13,903	n/c
Total	**$ 104,019**	**+10%**
ILLINOIS		
U of Illinois		
Urbana-Champaign	$ 173,194	+ 2%
Medical Center	106,386	− 7%
Chicago Circle	55,308	+29%
General university	24,254	+26%
Southern Illinois U	125,450	− 1%
Northern Illinois U	60,077	+ 2%
Illinois St U	46,743	1%
Western Illinois U	33,396	0%
Eastern Illinois U	24,439	+ 3%
Northeastern Illinois U	20,022	0%
Chicago St U	16,736	0%
Sangamon St U	13,037	+ 2%
Governors St U	13,204	0%
Community colleges	154,283	+ 5%
Student aid	93,807	+ 9%
Other appropriations*	68,946	+17%
Total	**$ 1,029,282**	**+ 4%**
INDIANA		
Indiana U	$ 182,288	+ 5%
Purdue U	130,683	+ 5%
Indiana St U	43,236	+ 4%
Ball St U	48,715	+ 5%
Indiana Voc-Tech C	20,674	+11%
Vincennes U	8,667	+15%
Student aid	21,151	+ 4%
Other appropriations	29,871	+10%
Total	**$ 485,285**	**+ 6%**
IOWA		
U of Iowa	$ 152,548	+24%
Iowa St U	115,666	+27%
U of Northern Iowa	36,864	+23%
Des Moines C of Osteo	450	−61%
Aid to area schools	57,953	− 2%
Student aid	15,550	+ 5%
Other appropriations	2,081	n/c
Total	**$ 381,112**	**+20%**
KANSAS		
U of Kansas	$ 130,863	+20%
Kansas St U	71,486	+22%
Wichita St U	30,395	+17%
Emporia St U	15,097	+15%
Pittsburg St U	14,599	+17%
Fort Hays St U	13,907	+22%
Washburn U of Topeka	3,419	+30%
Kansas Tech Inst	2,436	+51%
Community colleges	22,849	+21%
Other appropriations	6,972	+19%
Total	**$ 312,023**	**+20%**
KENTUCKY		
U of Kentucky	$ 146,914	+22%
U of Louisville	73,807	+18%
Eastern Kentucky U	32,217	+17%
Western Kentucky U	31,512	+18%
Murray St U	24,285	+16%
Morehead St U	19,432	+16%
Northern Kentucky U	15,762	+17%
Kentucky St U	9,629	+11%
Other appropriations	10,055	n/c
Total	**$ 363,614**	**+18%**
LOUISIANA		
Louisiana St U	$ 277,919	+24%
Southern U	36,607	+22%
Bd of Trustees system		
U of SW Louisiana	32,939	+30%
Louisiana Tech U	25,318	+30%
NE Louisiana U	25,240	+35%
SE Louisiana U	18,888	+31%
Northwestern St U	16,885	+21%
Nicholls St U	16,397	+23%
McNeese St U	15,784	+44%
Grambling St U	12,604	+19%
Delgado CC	12,136	+23%
System administration	922	+16%
Aid to pvt colleges	3,3,23	+28%
Student aid	2,458	+51%
Other appropriations	3,882	n/c
Total	**$ 501,802**	**+26%**
MAINE		
U of Maine	$ 57,120	+16%
Maine Maritime Acad	2,759	+15%
Vocational education	10,321	+28%
Student aid	1,715	39%
Total	**$ 71,915**	**+15%**
MARYLAND		
U of Maryland	$ 190,737	+16%
State colleges		
Towson	20,281	+ 5%
Morgan	14,068	+ 8%
Frostburg	8,465	+ 7%
Salisbury	7,172	+ 6%
U of Baltimore	6,739	+11%
Bowie	6,341	+ 6%
Coppin	5,507	+ 4%
St Mary's C of Md	3,753	+10%
Trustees	7,534	+66%
Community colleges	61,915	+25%
Aid to pvt colleges	11,565	+16%
Student aid	10,187	+36%
Other appropriations*	78,389	+23%
Total	**$ 432,654**	**+18%**
MASSACHUSETTS		
U of Massachusetts	$ 175,505	n/c
U of Lowell	28,475	+28%
SE Massachusetts U	19,677	+32%
State colleges		
Salem	14,172	+21%
Bridgewater	13,144	+22%
Fitchburg	11,619	+24%
Westfield	9,102	+27%
Framingham	9,066	+28%
Worcester	8,994	+25%
Mass Maritime Acad	7,084	+56%
North Adams	6,388	+22%
Mass C of Art	4,166	+22%
Aid to comm colleges	78,609	+27%
Student aid	19,000	+29%
Other appropriations	7,412	n/c
Total	**$ 412,413**	**+28%**



CHRONICLE MAP BY PETER H. STAFFORD

SOURCE: M. M. CHAMBERS

Changes in the amount of state tax funds appropriated for higher education in 1982-83 compared with 1980-81 are shown above. For the 50 states, the average change was a gain of 16 per cent.

Continued on Following Page

FACT-FILE—Continued

	Appropriations 1982-83 (add 000)	2-year change
MICHIGAN		
U of Michigan	$ 175,271	+13%
Michigan St U	155,914	+13%
Wayne St U	104,354	+13%
Western Michigan U	49,567	+13%
Eastern Michigan U	37,297	+14%
Central Michigan U	32,168	+16%
Ferris St C	23,809	+15%
Michigan Tech U	23,073	+14%
Northern Michigan U	22,977	+14%
Oakland U	21,322	+14%
Grand Valley St C	14,171	+14%
Saginaw Valley St C	7,496	+18%
Lake Superior St C	6,282	+13%
Community colleges	137,000	+12%
Student aid	53,000	+52%
Other appropriations	1,299	n/c
Total	**$ 865,000**	**+14%**
MINNESOTA		
U of Minnesota	$ 249,868	+11%
State universities	96,159	+22%
Aid to area voc-tech insts	85,195	— 6%
Aid to comm colleges	44,987	+19%
Student aid	38,035	0%
Other appropriations	5,259	n/c
Total	**$ 520,820**	**+ 9%**
MISSISSIPPI		
U of Mississippi	$ 70,832	+17%
Mississippi St U	59,959	+10%
U of So Mississippi	30,069	+ 9%
Jackson St U	15,361	+10%
Delta St U	8,919	+11%
Miss U for Women	8,134	— 1%
Alcorn St U	7,872	+ 5%
Miss Valley State U	6,811	+ 4%
Gulf Coast Research Lab	2,647	+ 2%
Vocational education	34,286	+12%
Community colleges	40,247	+24%
Student aid	1,587	+82%
Other appropriations	9,625	n/c
Total	**$ 296,351**	**+13%**
MISSOURI		
U of Missouri	$ 183,758	+ 0%
SW Missouri St U	24,356	+ 2%
Central Missouri St U	19,903	— 1%
SE Missouri St U	17,345	0%
NE Missouri St U	13,684	— 1%
NW Missouri St U	10,818	+10%
Missouri Western St C	7,193	— 4%
Missouri Southern St C	6,470	— 2%
Lincoln U	6,197	— 3%
Harris-Stowe C	2,953	+ 1%
Aid to pub comm colls	37,853	+14%
Student aid	7,611	—11%
Other appropriations*	19,949	+ 1%
Total	**$ 358,090**	**+ 1%**
MONTANA		
Montana St U	$ 38,433	+49%
U of Montana	26,336	+38%
Eastern Montana C	9,133	+30%
Northern Montana C	4,789	+37%
Western Montana C	2,621	+31%
C of Min Sci & Tech	6,803	+70%
Community colleges	2,644	+27%
Student aid	3,762	+133%
Other appropriations	752	n/c
Total	**$ 95,273**	**+41%**
NEBRASKA		
U of Nebraska	$ 147,008	+15%
Kearney St C	9,240	+15%
Wayne St C	5,364	+17%
Chadron St C	5,069	+14%
Peru St C	2,910	+10%
System office	481	—10%
Aid to tech comm colls	19,403	+10%
Other appropriations	135	+85%
Total	**$ 189,610**	**+14%**
NEVADA		
U of Nevada		
Reno	$ 32,495	+11%
Las Vegas	19,209	+16%
Community colleges	12,911	+26%
Other appropriations	7,314	n/c
Total	**$ 71,929**	**+16%**
NEW HAMPSHIRE		
U of New Hampshire	$ 19,543	+11%
Keene St C	3,739	+29%
Plymouth St C	3,525	+22%
Merrimack Valley C	377	+69%
School for Lifelong Learning	263	+136%
UNH System Adm	293	—86%
Aid to tech colleges	6,507	+13%
Student aid	328	—37%
Other appropriations	671	—28%
Total	**$ 35,246**	**+ 7%**
NEW JERSEY		
Rutgers U	$ 135,313	+14%
U of Medicine & Dentistry of N.J.	86,541	+25%
NJ Inst of Tech	17,647	+11%
State colleges		
Montclair	19,377	+ 9%
Paterson	18,371	+11%

	Appropriations 1982-82 (add 000)	2-year change
NEW JERSEY—Continued		
State Colleges—Continued		
Trenton	17,849	+16%
Kean	16,733	+12%
Glassboro	16,328	+14%
Jersey City	15,740	+17%
Richard Stockton	9,334	+16%
Ramapo	8,665	+13%
Thomas A Edison St C	1,272	+25%
Aid to county colleges	56,188	+ 6%
Aid to pvt colleges	10,900	+ 3%
Student aid	57,038	+19%
Other appropriations	10,769	+ 8%
Total	**$ 498,065**	**+15%**
NEW MEXICO		
U of New Mexico	$ 85,734	+26%
New Mexico St U	53,998	n/c
E New Mexico U	17,482	+32%
NM Inst of Min & Tech	8,766	+42%
NM Highlands U	8,078	+24%
W New Mexico U	4,437	+27%
N New Mexico CC	3,213	+33%
New Mexico Military Inst	252	— 47%
San Juan CC	336	n/c
NM Junior C	338	n/c
Student aid	390	+ 1%
Other appropriations	1,056	n/c
Total	**$ 184,084**	**+29%**
NEW YORK		
Total	**$ 2,010,001**	**+22%**
(Institutional totals not available)		
NORTH CAROLINA		
U of North Carolina		
Chapel Hill	$ 172,844	+15%
Greensboro	29,707	+17%
Charlotte	25,203	+23%
Wilmington	14,145	+33%
Asheville	6,006	+29%
North Carolina St U	124,058	+25%
East Carolina U	61,668	+39%
Appalachian St U	27,559	+20%
NC A&T St U	19,608	+23%
Western Carolina U	18,669	+18%
NC Central U	16,348	+18%
Winston-Salem St U	8,537	+20%
Fayetteville St U	8,025	+19%
Pembroke St U	6,793	+13%
Elizabeth City St U	6,763	+20%
NC Sch of the Arts	4,697	+23%
Community colleges and tech insts	204,359	+18%
Other appropriations	38,444	+10%
Total	**$ 793,432**	**+20%**
OHIO		
Ohio St U	$ 199,109	+15%
U of Cincinnati	83,300	+21%
Kent St U	43,528	+ 5%
U of Akron	42,341	+18%
Ohio U	40,701	+17%
Bowling Green St U	39,322	+16%
U of Toledo	36,730	+27%
Wright St U	34,870	+33%
Cleveland St U	35,605	+21%
Miami U	31,281	+ 5
Youngstown St U	26,019	+13%
Medical C of Ohio	15,513	+11%
Northeastern Med C	9,326	+53%
Central St U	8,864	+ 8%
Case Western Res U	7,031	+ 5%
Aid to comm colleges	47,712	+21%
Aid to gen & tech colleges	5,947	+37%
U branches	31,379	+44%
Technical colleges	48,252	+31%
Other appropriations	58,901	+13%
Total	**$ 846,331**	**+18%**
OKLAHOMA		
U of Oklahoma	$ 115,162	+43%
Oklahoma St U	107,511	+47%
Central St U	22,591	+46%
Northeastern St U	14,349	+57%
Southwestern St U	12,190	+42%
Cameron U	10,397	+40%
Southeastern St U	9,454	+53%
East Central St U	9,029	+49%
Okla C of Osteo Med	6,692	+67%
Langston U	4,827	+45%
Northwestern St U	4,307	+58%
Okla Panhandle St U	3,925	+50%
U of Science & Arts	3,843	+33%
Community colleges	70,202	+48%
Student aid	1,406	n/c
Other appropriations	3,999	n/c
Total	**$ 399,886**	**+47%**
OREGON		
Oregon St U	55,953	— 1%
U of Oregon	$ 31,642	+ 1%
Health Sci Ctr	42,910	+ 4%
Portland St U	22,314	— 4%
So Oregon St C	7,675	— 6%
Western Oregon St C	6,920	+ 1%
Oregon Inst of Tech	6,643	+ 5%
Eastern Oregon St C	4,562	+ 5%
Community colleges	46,855	— 8%
Student aid	8,232	+17%
Other appropriations	6,813	n/c
Total	**$ 240,518**	**— 4%**

	Appropriations 1982-83 (add 000)	2-year change
PENNSYLVANIA		
Pennsylvania St U	$ 143,481	+13%
Temple U	87,083	+10%
U of Pittsburgh	78,235	— 2%
Lincoln U	4,441	+13%
State-owned insts		
Indiana U of Pa	31,636	+19%
West Chester	22,569	+ 8%
Millersville	17,378	+20%
Bloomsburg	17,707	+18%
Edinboro	16,563	0%
Shippensburg	16,533	+17%
Clarion	16,410	+14%
Slippery Rock	16,230	+ 7%
Kutztown	15,382	+16%
California	14,958	0%
East Stroudsburg	13,445	+13%
Cheyney	10,359	+ 8%
Mansfield	10,352	0%
Lock Haven	10,016	+13%
Unallocated	886	+122%
Pvt. state-aided insts		
U of Pennsylvania	22,892	+12%
Thomas Jefferson U	6,092	+ 4%
Drexel U	4,079	+ 7%
Philadelphia C of Osteopathic Med	3,800	+57%
Hahnemann Med U	3,707	+ 5%
Med C of Pa	2,340	+ 2%
Pa C of Optometry	965	+ 5%
Pa C Podiatric Med	742	+ 5%
Philadelphia C of Art	461	— 1%
Philadelphia C of Textiles & Science	405	— 1%
Del Valley Sci & Ag	307	— 1%
Philadelphia C of Performing Arts	107	+ 1%
Community colleges*	47,700	+14%
Other appropriations*	233,735	n/c
Total	**$ 870,965**	**+12%**
RHODE ISLAND		
U of Rhode Island	$ 44,338	+12%
Rhode Island C	21,321	+14%
CC of Rhode Island	16,567	+16%
Student aid	7,433	+60%
Aid to medical ed	1,187	+ 2%
Other appropriations	209	n/c
Total	**$ 91,055**	**+16%**
SOUTH CAROLINA		
U of South Carolina	$ 102,989	+ 8%
Medical U of SC	72,725	+ 4%
Clemson U	68,524	+ 8%
South Carolina St C	12,643	+10%
Winthrop C	12,403	+11%
C of Charleston	11,862	+ 9%
Citadel Mil C of SC	9,391	+ 4%
Francis Marion C	6,063	+ 3%
Lander C	4,388	+10%
Board for Tech & Comp Ed	58,767	+14%
Aid to pvt-coll students	12,368	+12%
Other appropriations	1,724	+ 9%
Total	**$ 373,847**	**+ 8%**
SOUTH DAKOTA		
South Dakota St U	$ 19,195	— 1%
U of South Dakota	16,695	+ 1%
SD Sch of Mines & Tech	4,675	+ 4%
Northern St C	3,772	— 3%
Black Hills St C	2,991	— 7%
Dakota St C	1,908	+ 8%
Student aid	245	n/c
Other appropriations	4,022	n/c
Total	**$ 53,503**	**0%**
TENNESSEE		
U of Tennessee	$ 140,476	— 6%
Memphis St U	33,387	+ 1%
East Tennessee St U	22,619	+ 4%
Middle Tenn St U	20,227	+13%
Tennessee Tech U	15,327	+13%
Tennessee St U	13,881	—11%
Austin Peay St U	8,369	+ 9%
Community colleges	34,804	+ 7%
State tech insts	15,783	+22%
Other appropriations	69,382	n/c
Total	**$ 374,255**	**+11%**
TEXAS		
U of Texas	$ 776,814	+44%
Texas A&M U	235,844	+44%
Texas Tech U	111,503	+35%
U of Houston	108,927	+20%
Texas St U System	71,892	+20%
E Texas St U	25,291	+31%
U System of S Texas	24,240	+20%
North Texas St U	44,186	+23%
Texas St Tech Inst	33,414	+75%
Texas Woman's U	27,861	+ 9%
Lamar U	26,810	+35%
Stephen Austin St U	22,971	+31%
Texas Southern U	26,597	+67%
Pan American U	19,773	+32%
Tex C Osteo Med	18,225	+27%
West Texas St U	14,882	+41%
Midwestern St U	8,643	+16%
Community colleges	365,045	+45%
Coordinating board	69,364	+37%
Other appropriations	3,250	+16%
Total	**$ 2,035,534**	**+39%**

	Appropriations 1982-83 (add 000)	2-year change
UTAH		
U of Utah	$ 87,899	+24%
Utah St U	45,074	+21%
Weber St C	23,157	+22%
Utah Tech C		
Salt Lake	9,003	+21%
Provo	7,914	+21%
Southern Utah St C	7,179	+24%
Snow C	3,961	+24%
Dixie C	3,937	+24%
C of Eastern Utah	3,179	+25%
Student aid	169	+17%
Other appropriations	4,905	n/c
Total	**$ 196,376**	**+22%**
VERMONT		
U of Vermont	$ 20,686	+21%
Vermont St colleges	9,863	+23%
Student aid	7,093	+32%
Other appropriations	49	n/c
Total	**$ 37,691**	**+24%**
VIRGINIA		
Virginia Polytech Inst and St U	$ 104,596	+18%
Va Commonwealth U	100,431	+18%
U of Virginia	98,017	+21%
Old Dominion U	30,005	+23%
C of William and Mary	27,173	+16%
George Mason U	25,449	+39%
James Madison U	19,114	+17%
Norfolk St U	15,445	+16%
Radford U	12,102	+23%
Virginia St U	10,230	+12%
Longwood C	6,169	+23%
Mary Washington C	6,087	+23%
Virginia Military Inst	5,899	+27%
Christopher Newport C	5,395	+24%
Community colleges	117,282	+20%
Other appropriations	23,248	n/c
Total	**$ 616,475**	**+21%**
WEST VIRGINIA		
West Virginia U	$ 83,633	+ 5%
Marshall U	23,080	+ 9%
Fairmont St C	7,401	+ 5%
W Va Inst of Tech	6,538	+ 6%
West Virginia St C	6,451	+ 6%
West Liberty St C	5,741	+ 4%
Shepherd C	4,717	+ 6%
Concord C	4,490	+ 6%
W Va C of Grad Studies	3,957	+ 8%
Glenville St C	3,799	+ 9%
West Virginia Sch of Osteopathic Med	3,611	+20%
Bluefield St C	3,523	+ 6%
Community colleges	8,807	+ 7%
Student aid	2,800	+ 8%
Other appropriations*	24,589	n/c
Total	**$ 193,137**	**+14%**
WISCONSIN		
U of Wisconsin System	462,627	+10%
Med C of Wisconsin	6,436	+11%
Voc-tech adult ed	67,075	+13%
Other appropriations	13,957	— 5%
Total	**$ 550,095**	**+ 8%**
WYOMING		
U of Wyoming	$ 68,286	+37%
Community colleges	28,789	+40%
Other appropriations	124	+ 8%
Total	**$ 97,199**	**+38%**

Biennial Appropriations

	Appropriations 1980-81 (add 000)	2-year change
NORTH DAKOTA		
North Dakota St U	$ 80,009	+43%
U of North Dakota	76,399	+47%
St Sch of Science	19,117	+37%
Minot St C	14,017	+49%
Dickinson St C	8,209	+40%
Valley City St C	6,838	+35%
Mayville St C	5,975	+35%
Community colleges	6,111	+38%
Aid to pvt-coll students	400	+100%
Total	**$ 217,077**	**+43%**
WASHINGTON		
U of Washington	$ 256,760	— 4%
Washington St U	169,897	+ 5%
W Washington U	54,017	+ 5%
E Washington U	53,163	+16%
Central Wash U	46,633	+12%
Evergreen St C	23,119	+19%
Community colleges	369,140	+12%
Student aid	20,119	+79%
Other appropriations	2,795	n/c
Total	**$ 995,643**	**+ 6%**

NOTE: Some totals may be inconsistent with itemized figures because of rounding.

n/c Not comparable

* Estimated

— Indicates change of less than 1 per cent

Homosexual Academics Say 'Coming Out' Could Jeopardize Careers

By LAWRENCE BIEMILLER

CHICAGO

Homosexual faculty members and administrators are generally more reluctant to "come out"—to reveal their sexual preferences to their colleagues, students, and families—than are homosexual men and women in American society at large, said participants in the annual conference of the Gay Academic Union here last week.

That reluctance, participants said, can be attributed both to conservative attitudes toward sexuality on many campuses and to homosexuals' fears that telling the truth about their preferences would impede or curtail their academic careers.

"Even among liberal academics, the feeling is, 'It's okay to be gay, but keep it in the bedroom,' " said Tim Wolfred, a psychologist who was the first openly homosexual person to be elected to the governing board of the San Francisco Community College District.

He left unsaid what almost no one attending the conference needed to be told—that many homosexuals find the pressure to keep their private lives separate from their careers extremely difficult to live with.

Most of the conference's participants—more than 400 men and women who ranged in age from their 20's to their 70's—said they had come out some time ago. They agreed, however, that those who had done so were "only the tip of the iceberg"—as one participant put it—in education and in American society as a whole.

Alfred Kinsey, the sociologist, reported in 1948 that 4 per cent of American men and between 2 and 3 per cent of American women were exclusively homosexual. Other researchers have maintained that homosexuals make up as much as 10 per cent of the population.

"For every person here, there must be at least 20 who disdained to come because they feel they can't come out," said Margaret Cruikshank, an instructor in the English department at the City College of San Francisco.

Even in San Francisco, often considered a mecca for homosexual men and women, Ms. Cruikshank, Mr. Wolfred, and others have found many manifestations of anti-homosexual attitudes, they said. "The community-college district had major problems with homophobia," Mr. Wolfred said. "Faculty members on search committees would ask people whether they had wives or girlfriends. And only three or four faculty members had come out openly."

Larry Klein, assistant to the chancellor of the San Francisco Community College District, recalled that when he first arrived at the campus as an openly homosexual man, "the people who avoided me most were the closeted gays, who were worried that being seen with me would make them suspect."

Mr. Klein, who was formerly a professor of English at Saint Louis University, said homophobia was especially strong in English departments. Perhaps because literature is seen by some as a less masculine pursuit than, for example, chemistry or physics, heterosexual English instructors worry that they might be mistaken for homosexuals, Mr. Klein said, and respond with overtly homophobic attitudes and behavior.

Mr. Klein added, "What I really resent is the implication that gay faculty members are going to seduce students. For every one gay attraction between a professor and a student, I've seen 10 straight liaisons—relationships about which everyone was completely open."

"I've met an awful lot of isolated people at this conference," Mr. Wolfred said. "They know they're not the only gays on their campuses, but they're the only ones who have come out."

"And as soon as someone comes out, he's an outsider," said Mr. Klein. "Peer support makes all the difference, but it's tough to get in higher education."

Ms. Cruikshank, the editor of a lesbian-studies anthology being published this month by the Feminist Press, said, "Very few lesbians are tenured. I know of only one woman who received tenure as a lesbian."

On many campuses, homosexual students feel they have a good deal more latitude than do faculty members. Several of those attending the conference pointed out that there are organizations for homosexual students on a large number of campuses—nearly half of all public institutions and almost a fifth of all private institutions, according to a survey done for *The Chronicle* in 1981.

700 Members

The Gay Academic Union, by contrast, now has just over 700 members, most of whom are affiliated with one of its local chapters, the strongest of which are in Los Angeles, San Diego, and Chicago. Although lesbians and gay men have frequently disagreed in recent years about the order in which various targets for social change should be addressed, men and women seem to coexist peaceably within the G.A.U.

One of the union's goals is to reduce discrimination against homosexuals on campuses. G.A.U. officials acknowledge, however, that because of the national organization's limited resources and the autonomy of local chapters, few attempts have been made to meet that goal.

James Levin, a professor in the department of special programs at City College of the City University of New York and a director of the G.A.U., noted that most discrimination cases involving homosexual faculty members were "too complex, probably, for anyone but a specialist from the American Civil Liberties Union." However, Mr. Levin, who is a lawyer, volunteered during the conference to serve as a conduit for information regarding discrimination on campuses and how to fight it.

The G.A.U. publishes a quarterly newsletter and administers a scholarship fund, which distributes money to homosexual students "whose work promises to further the goals of G.A.U. in the gathering and disseminating of scholarly information about lesbian and gay life styles."

Although for the most part the union is made up of college faculty

Continued on Following Page

FACT-FILE

Analysis of State Funds for Higher Education

	1982-83 appropriations (a)		Appropriations per capita (b)		Approp. per $1,000 of personal income (c)		2-year change (d)		10-year change (e)		2-year change less inflation (f)		10-year change less inflation (g)	
	Amount	Rank	Amount	Rank	Amount	Rank	Per cent	Rank	Per cent	Rank	Per cent	Rank	Per cent	Rank
Alabama	$ 407,082,000	20	$103.93	27	$12.64	12	+ 6%	43	+297%	5	−10%	43	+ 71%	5
Alaska	146,826,000	39	356.37	1	25.91	1	+79%	1	+568%	1	+53%	1	+187%	1
Arizona	322,525,000	28	115.43	23	11.83	18	+15%	28	+186%	29	− 2%	28	+ 23%	29
Arkansas	198,090,000	33	86.28	38	10.73	28	+ 6%	44	+251%	90	−10%	44	+ 51%	9
California	3,274,865,000	1	135.35	7	11.35	25	+ 4%	47	+224%	16	−12%	47	+ 40%	16
Colorado	350,020,000	27	118.05	18	10.53	29	+33%	8	+198%	24	+13%	8	+ 28%	24
Connecticut	252,608,000	31	80.60	41	6.29	48	+20%	19	+122%	43	+ 3%	19	− 5%	43
Delaware	76,900,000	45	128.60	13	11.58	23	+21%	18	+197%	25	+ 3%	18	+ 28%	25
Florida	905,796,000	5	89.95	35	8.75	38	+26%	11	+200%	22	+ 7%	11	+ 29%	22
Georgia	534,219,000	12	95.84	31	10.73	27	+24%	14	+200%	21	+ 5%	14	+ 29%	21
Hawaii	185,114,000	37	188.70	3	17.10	2	+37%	7	+187%	28	+16%	7	+ 23%	28
Idaho	104,019,000	41	108.47	26	12.13	16	+10%	37	+183%	30	− 6%	37	+ 22%	30
Illinois	1,029,282,000	4	89.80	36	7.76	41	+ 4%	46	+ 99%	50	−11%	46	− 14%	50
Indiana	485,285,000	17	88.75	37	9.13	34	+ 6%	45	+130%	40	−10%	45	− 1%	40
Iowa	381,112,000	22	131.46	9	12.55	14	+20%	22	+204%	20	+ 2%	22	+ 31%	20
Kansas	312,023,000	29	130.94	10	12.11	17	+20%	21	+235%	13	+ 2%	21	+ 44%	13
Kentucky	363,614,000	25	99.29	29	11.79	21	+18%	23	+161%	26	+ 1%	23	+ 27%	26
Louisiana	501,802,000	14	116.48	21	12.24	15	+26%	12	+242%	12	+ 7%	12	+ 47%	12
Maine	71,915,000	47	63.47	49	7.44	44	+15%	29	+114%	46	− 2%	29	− 8%	46
Maryland	432,654,000	18	101.49	28	8.84	36	+18%	24	+172%	32	0%	24	+ 17%	32
Massachusetts	412,413,000	19	71.44	47	6.42	47	+28%	10	+167%	33	+ 9%	10	+ 15%	33
Michigan	865,000,000	7	93.98	33	8.71	39	+14%	31	+107%	49	− 3%	31	− 11%	49
Minnesota	520,920,000	13	127.24	14	11.82	19	+ 9%	38	+199%	23	− 7%	38	+ 29%	23
Mississippi	296,351,000	30	117.09	20	15.81	6	+13%	34	+205%	19	− 3%	34	+ 31%	19
Missouri	358,090,000	26	72.47	46	7.51	43	+ 1%	48	+122%	44	−14%	48	− 5%	44
Montana	95,273,000	43	120.14	16	12.77	11	+41%	4	+209%	17	+20%	4	+ 33%	17
Nebraska	189,610,000	36	120.23	15	11.60	22	+14%	32	+234%	14	− 3%	32	+ 44%	14
Nevada	71,929,000	46	85.12	39	7.35	45	+16%	27	+248%	10	− 1%	27	+ 50%	10
New Hampshire	35,246,000	50	37.66	50	3.77	50	+ 7%	41	+156%	36	− 9%	41	+ 10%	36
New Jersey	498,065,000	15	67.27	48	5.56	49	+15%	30	+111%	48	− 2%	30	− 9%	48
New Mexico	184,084,000	38	138.62	5	16.26	4	+28%	9	+261%	7	+ 9%	9	+ 55%	7
New York	2,010,001,000	3	114.19	24	9.96	31	+22%	15	+144%	38	+ 4%	15	+ 5%	38
North Carolina	793,432,000	9	133.28	8	15.41	8	+20%	20	+256%	8	+ 2%	20	+ 53%	8
North Dakota	108,539,000	40	164.95	4	16.14	5	+43%	3	+295%	6	+22%	3	+ 70%	6
Ohio	846,331,000	8	78.50	42	7.61	42	+18%	25	+178%	31	0%	25	+ 20%	31
Oklahoma	399,886,000	21	129.00	12	12.59	13	+47%	2	+389%	3	+26%	2	+110%	3
Oregon	240,519,000	32	90.73	34	9.07	35	− 4%	50	+125%	42	−18%	50	− 3%	42
Pennsylvania	870,965,000	6	73.37	44	7.06	46	+12%	35	+120%	45	− 5%	35	− 5%	45
Rhode Island	91,055,000	44	95.55	32	9.41	33	+16%	26	+158%	35	− 1%	26	+ 11%	35
South Carolina	373,847,000	24	118.04	19	14.69	9	+ 8%	39	+256%	18	− 8%	39	+ 31%	18
South Dakota	53,503,000	48	77.99	43	8.83	37	0%	49	+135%	39	−15%	49	+ 1%	39
Tennessee	374,255,000	23	81.15	40	9.61	32	+11%	36	+192%	27	− 6%	36	+ 26%	27
Texas	2,035,534,000	2	137.85	6	12.85	10	+39%	5	+339%	4	+18%	5	+ 89%	4
Utah	196,376,000	34	129.36	11	15.56	7	+22%	16	+243%	11	+ 4%	16	+ 48%	11
Vermont	37,691,000	49	73.04	45	8.38	40	+24%	13	+125%	41	+ 5%	13	− 3%	41
Virginia	616,475,000	10	113.53	25	10.97	26	+21%	17	+232%	15	+ 3%	17	+ 43%	15
Washington	497,822,000	16	118.05	17	10.47	30	+ 6%	42	+161%	34	− 9%	42	+ 12%	34
West Virginia	193,137,000	35	98.94	30	11.81	20	+14%	33	+148%	37	− 3%	33	+ 7%	37
Wisconsin	550,095,000	11	116.00	22	11.56	24	+ 8%	40	+114%	47	− 8%	40	− 8%	47
Wyoming	97,199,000	42	197.56	2	16.94	3	+38%	6	+431%	2	+17%	6	+128%	2
Total U. S.	**$24,249,394,000**		**$106.04**		**$10.12**		**+16%**		**+188%**		**− 1%**		**+ 23%**	

(a) Reported by M. M. Chambers of Illinois State University as state tax funds appropriated for operating expenses and scholarship programs for higher education. Amount of appropriations may be reduced later in some states because of shortfall in revenues. Not included are appropriations for capital outlay or money from sources other than state taxes, such as student fees. Included are appropriations for annual operating expenses even if appropriated to some other agency of the state for ultimate allocation to institutions of higher education. Pre-allocated state taxes whose proceeds are dedicated to any institution of higher education are included even though periodic appropriation by the legislature may be bypassed. Also included are state tax funds appropriated for scholarships and statewide governing or coordinating boards.

(b) State appropriations divided by the U. S. Census Bureau's population estimates for 1981.

(c) State appropriations divided by personal income, in thousands of dollars, reported by the U. S. Commerce Department for 1981.

(d) Increase in appropriations for 1982-83 over 1980-81, as reported by M.M. Chambers.

(e) Increase in appropriations for 1982-83 over 1972-73, as reported by M.M. Chambers.

(f) Two-year increase in appropriations adjusted for inflation of 17.4 per cent, as indicated by the Labor Department's Consumer Price Indexes for June, 1982, and June, 1980.

(g) Ten-year increase in appropriations adjusted for inflation of 132.5 per cent, as indicated by the Labor Department's Consumer Price Indexes for June, 1982, and June, 1972.

FACT-FILE

Where to Go for Information About Foundations: The Foundation Center's Reference Collections

Following are reference collections operated or coordinated by the Foundation Center that are available free of charge to the public. According to the center, a nonprofit organization established by foundations in 1956, the material falls into several categories:

▶ Major reference collections operated by the center in four cities—New York, Washington, Cleveland, and San Francisco—which contain all of the center's publications, as well as other books, services, and periodicals on philanthropy; annual reports and newsletters from foundations, and press clippings. The collections in New York and Washington also contain I.R.S. returns for all currently active private foundations in the U.S., while those in Cleveland and San Francisco contain I.R.S. records for foundations in Midwestern and Western states respectively.

▶ Cooperating collections, listed below by state, which contain I.R.S. records for foundations within those states and all of the Foundation Center's publications.

▶ Local affiliate collections, indicated by (L), which include the center's major publications.

▶ Collections operated by individual foundations or area associations of foundations, indicated by (F), which often can provide special materials or services, such as seminars or orientation sessions.

▶ Various other collections operated by cooperating libraries or other nonprofit agencies. Many are located within public institutions and all are open to the public during a regular schedule of hours.

The Foundation Center's Washington office accepts credit-card book orders and provides information about new reference collections. Callers in the continental U.S. but outside the Washington area may contact that office toll-free by dialing (800) 424-9836.

Major Collections Operated by the Foundation Center

The Foundation Center
Main Office
888 Seventh Avenue
New York 10106
(212) 975-1120

The Foundation Center
1001 Connecticut Avenue, N.W.
Washington 20036
(202) 331-1400

The Foundation Center
Kent H. Smith Library
739 National City Bank Building
629 Euclid Avenue
Cleveland 44114
(216) 861-1933

The Foundation Center
312 Sutter Street
San Francisco 94108
(415) 397-0902

Cooperating Collections

ALABAMA

Auburn University at Montgomery
Library
Montgomery 36193
(205) 279-9110

Birmingham Public Library
Reference Department
2020 Park Place
Birmingham 35203
(205) 254-2541

ALASKA

University of Alaska at Anchorage
Library
Reader Services
3211 Providence Drive
Anchorage 99504
(907) 263-1848

ARIZONA

Phoenix Public Library
Social Sciences Subject Department
12 East McDowell Road
Phoenix 85004
(602) 262-4782

Tucson Public Library
Main Library
200 South Sixth Avenue
P.O. Box 27470
Tucson 85726
(602) 791-4393

ARKANSAS

Little Rock Public Library
Reference Department
700 Louisiana Street
Little Rock 72201
(501) 374-7546

Westark Community College Library
Grand Avenue at Waldron Road
P.O. Box 3649
Fort Smith 72913
(501) 785-4241

CALIFORNIA

California Community Foundation
Funding Information Center
1157 West Sixth Street
Los Angeles 90017
(213) 413-4719 (F)

California State Library
Funding Sources Information Center
Reference Services, Room 309
914 Capitol Mall
P.O. Box 2037
Sacramento 95809
(916) 322-0369 (L)

Central Sierra Arts Council
19411 Village Drive
Sonora 95370
(209) 532-2787 (L)

The Foundation Center
312 Sutter Street
San Francisco 94108
(415) 397-0902

North Coast Opportunities
Community Services
101 West Church Street
Ukiah 95482
(707) 462-1954 (L)

Riverside City-County Library
3581 Seventh Street
Riverside 92501
(714) 787-7201 (L)

San Diego Public Library
Literature and Languages Section
820 E Street
San Diego 92101
(714) 236-5816

Santa Barbara Public Library
Reference Section
40 East Anapamu
P.O. Box 1019
Santa Barbara 93102
(805) 962-7653

COLORADO

Denver Public Library
Sociology Division
1357 Broadway
Denver 80203
(303) 571-2190

CONNECTICUT

D.A.T.A.
81 Saltonstall Avenue
New Haven 06513
(203) 776-0797 (L)

Hartford Public Library
Reference Department
500 Main Street
Hartford 06103
(203) 525-9121

DELAWARE

University of Delaware
Hugh Morris Library
Newark 19711
(302) 738-2965

DISTRICT OF COLUMBIA

The Foundation Center
1001 Connecticut Avenue, N.W.
Washington 20036
(202) 331-1400

FLORIDA

Jacksonville Public Library
Business, Science, and Industry
Department
122 North Ocean Street
Jacksonville 32202
(904) 633-3926

Leon County Public Library
Community Funding Resources
Center
1940 North Monroe Street
Tallahassee 32303
(904) 487-2665 (L)

Miami-Dade Public Library
Florida Collection
One Biscayne Boulevard
Miami 33132
(305) 579-5001

Orlando Public Library
10 North Rosalind
Orlando 32801
(305) 425-4694 (L)

GEORGIA

Atlanta Public Library
One Margaret Mitchell Square
at Forsyth and Carnegie Way
Atlanta 30303
(404) 688-4636

HAWAII

The Hawaiian Foundation
Community Resource Center
Financial Plaza of the Pacific
111 South King Street
Honolulu 96813
(808) 525-8548 (L) (F)

University of Hawaii
Thomas Hale Hamilton Library
2550 The Mall
Honolulu 96822
(808) 948-7214

IDAHO

Caldwell Public Library
Circulation Desk
1010 Dearborn Street
Caldwell 83605
(208) 459-3242

ILLINOIS

Donors Forum of Chicago
208 South LaSalle Street, Room 600
Chicago 60604
(312) 726-4882 (F)

Sangamon State University Library
Shepherd Road
Springfield 62708
(217) 786-6633

INDIANA

Indianapolis-Marion County
Public Library
Social Science Division
40 East St. Clair Street
Indianapolis 46204
(317) 269-1733

Indiana University
Northwest Library
3400 Broadway
Gary 46408
(219) 980-6580 (L)

IOWA

Public Library of Des Moines
Reference Department
100 Locust Street
Des Moines 50308
(515) 283-4259

KANSAS

Topeka Public Library
1515 West Tenth Street
Topeka 66604
(913) 233-2040

Wichita Public Library
223 South Main Street
Wichita 67202
(316) 262-0611 (L)

KENTUCKY

Louisville Community Foundation
623 West Main Street
Louisville 40202
(502) 585-4649 (L) (F)

Louisville Free Public Library
Fourth and York Streets
Louisville 40203
(502) 584-4154

LOUISIANA

East Baton Rouge Parish Library
Centroplex Library
120 St. Louis Street
P.O. Box 1471
Baton Rouge 70821
(504) 389-4960

New Orleans Public Library
Business and Science Division
219 Loyola Avenue
New Orleans 70140
(504) 524-7382, extension 33

MAINE

University of Southern Maine
Center for Research
and Advanced Study
246 Deering Avenue
Portland 04102
(207) 780-4411

MARYLAND

Enoch Pratt Free Library
Social Science and History
Department
400 Cathedral Street
Baltimore 21201
(301) 396-5320

MASSACHUSETTS

Associated Grantmakers
of Massachusetts
294 Washington Street
Suite 501
Boston 02108
(617) 426-2608 (F)

Boston Public Library
Copley Square
Box 286 Z
Boston 02117
(617) 536-5400

Walpole Public Library
Walcott Avenue at Union Street
East Walpole 02032
(617) 668-0232 (L)

Western Massachusetts Funding
Resource Center
Campaign for Human Development
Chancery Annex
73 Chestnut Street
Springfield 01103
(413) 732-3175 (L)

Worcester Public Library
Grants Resource Center
Salem Square
Worcester 01608
(617) 799-1655 (L)

MICHIGAN

Alpena County Library
Reference Department
211 North First Avenue
Alpena 49707
(517) 356-6188

Henry Ford Centennial Library
16301 Michigan Avenue
Dearborn 48126
(313) 943-2337

Farmington Community Library
32737 West 12 Mile Road
Farmington Hills 48108
(313) 553-0300 (L)

Grand Rapids Public Library
Sociology and Education
Department
Library Plaza
Grand Rapids 49502
(616) 456-4411

Michigan State University Libraries
Reference Department
East Lansing 48824
(517) 353-8816

Michigan Technological University
Library
Highway U.S. 41
Houghton 49931
(906) 487-2507

University of Michigan at Flint
Library
Reference Department
Clifford and Kearsley Streets
Flint 48503
(313) 762-3408

Wayne State University
Purdy Library
Detroit 48202
(313) 577-4040

MINNESOTA

Minneapolis Public Library
Sociology Department
300 Nicollet Mall
Minneapolis 55401
(612) 372-6555

St. Paul Public Library
90 West Fourth Street
St. Paul 55102
(612) 292-6311 (L)

MISSISSIPPI

Jackson Metropolitan Library
301 North State Street
Jackson 39201
(601) 944-1120

MISSOURI

Clearinghouse for Midcontinent
Foundations
University of Missouri at Kansas City
Law School, Suite 1-300
52nd and Oak Street
P.O. Box 7215
Kansas City 64110
(816) 276-1176 (F)

Kansas City Public Library
311 East 12th Street
Kansas City 64106
(816) 221-2685

Metropolitan Association
for Philanthropy
5600 Oakland, Room G-324
St. Louis 63110
(314) 647-2290 (F)

Springfield-Greene County Library
397 East Central Street
P.O. Box 737
Springfield 65801
(417) 866-4636

Continued on Following Page

FACT-FILE-Continued

MONTANA

Eastern Montana College Library
Reference Department
1500 North 30th Street
Billings 59101
(406) 657-2262

Montana State Library
930 East Lyndale Avenue
Helena 59601
(406) 449-3004 (L)

NEBRASKA

W. Dale Clark Library
Social Sciences Department
215 South 15th Street
Omaha 68102
(402) 444-4822

NEVADA

Clark County Library
1401 East Flamingo Road
Las Vegas 89109
(702) 733-7810

Washoe County Library
301 South Center Street
P.O. Box 2151
Reno 89505
(702) 785-4190

NEW HAMPSHIRE

Littleton Public Library
109 Main Street
Littleton 03561
(603) 444-5741 (L)

The New Hampshire Charitable Fund
One South Street
P.O. Box 1335
Concord 03301
(603) 225-6641 (F)

NEW JERSEY

New Jersey State Library
Governmental Reference
185 West State Street
Trenton 08625
(609) 292-6220

The Support Center
744 Broad Street
Suite 1106
Newark 07102
(201) 643-5774 (L)

NEW MEXICO

New Mexico State Library
325 Don Gaspar Street
P.O. Box 1629
Santa Fe 87503
(505) 827-2033

NEW YORK

Buffalo and Erie County
Public Library
Lafayette Square
Buffalo 14203
(716) 856-7525

The Foundation Center
Main Office
888 Seventh Avenue
New York 10106
(212) 975-1120

Levittown Public Library
Reference Department
One Bluegrass Lane
Levittown 11756
(516) 731-5728

New York State Library
Cultural Education Center
Humanities Section, Sixth Floor
Empire State Plaza
Albany 12230
(518) 474-7645

Onondaga County Public Library
335 Montgomery Street
Syracuse 13202
(315) 473-4491

Plattsburgh Public Library
Reference Department
15 Oak Street
P.O. Box 570
Plattsburgh 12901
(518) 563-0921

Rochester Public Library
Business and Social Sciences
Division
115 South Avenue
Rochester 14604
(716) 428-7328

NORTH CAROLINA

North Carolina State Library
109 East Jones Street
Raleigh 27611
(919) 733-3270

The Winston-Salem Foundation
229 First Union National Bank
Building
Winston-Salem 27101
(919) 725-2382 (F)

NORTH DAKOTA

Bismarck Junior College Library
Western Dakota Grants
Resource Center
Schafer Heights
Bismarck 58501
(701) 224-5450 (L)

North Dakota State University
Library
West College Street at 12th Avenue
Fargo 58105
(701) 237-8876

OHIO

The Foundation Center
Kent H. Smith Library
739 National City Bank Building
629 Euclid Avenue
Cleveland 44114
(216) 861-1933

Ohio Department of Economic
and Community Development
Office of Grants Assistance
30 East Broad Street, 24th Floor
Columbus 43215
(614) 466-2480 (L)

Public Library of Cincinnati
and Hamilton County
Education and Religion Department
800 Vine Street
Cincinnati 45202
(513) 369-6940

Toledo-Lucas County Public Library
Social Science Department
325 Michigan Street
Toledo 43624
(419) 255-7055

OKLAHOMA

Oklahoma City University
Dulaney-Browne Library
2501 North Blackwelder
Oklahoma City 73106
(405) 521-5072

Tulsa City-County Library System
Reference Department
400 Civic Center
Tulsa 74103
(918) 581-5144

OREGON

Library Association of Portland
Education and Documents Room
801 S. W. Tenth Avenue
Portland 97205
(503) 223-7201

PENNSYLVANIA

Erie County Public Library
3 South Perry Square
Erie 16501
(814) 452-2333 (L)

Free Library of Philadelphia
Logan Square
Philadelphia 19103
(215) 686-5423

Northampton County Area
Community College
Learning Resources Center
3835 Green Pond Road
Bethlehem 18017
(215) 861-5358 (L)

University of Pittsburgh
G-2A Hillman Library
Forbes Avenue and Bigelow
Boulevard
Pittsburgh 15260
(412) 624-4528

RHODE ISLAND

Providence Public Library
Reference Department
150 Empire Street
Providence 02903
(401) 521-7722

SOUTH CAROLINA

Charleston County Public Library
404 King Street
Charleston 29401
(803) 723-1645 (L)

South Carolina State Library
Reader Services Department
1500 Senate Street
Columbia 29211
(803) 758-3181

SOUTH DAKOTA

South Dakota State Library
State Library Building
322 South Fort Street
Pierre 57501
(605) 773-3131

TENNESSEE

Knoxville-Knox County
Public Library
500 West Church Avenue
Knoxville 37902
(615) 523-0781

Memphis Public Library
1850 Peabody Avenue
Memphis 38104
(901) 528-2957

TEXAS

Corpus Christi State University
Library
6300 Ocean Drive
Corpus Christi 78412
(512) 991-6810

Dallas Public Library
Grants Information Service
1515 Young Street
Dallas 75201
(214) 749-4100

El Paso Community Foundation
El Paso National Bank Building
Suite 1616
Mesa and Main Streets
El Paso 79901
(915) 533-4020 (F)

Funding Information Library
1120 Milam Building
115 East Travis Street
San Antonio 78205
(512) 227-4333

University of Texas at Austin
Regional Foundation Library
The Hogg Foundation
for Mental Health
Austin 78712
(512) 471-5041 (F)

Houston Public Library
Bibliographic Information Center
500 McKinney Avenue
Houston 77002
(713) 224-5441

Texas Christian University Library
Funding Information Center
Ft. Worth 76129
(817) 921-7000,
extension 6130 (L)

UTAH

Salt Lake City Public Library
Information Center
209 East Fifth South
Salt Lake City 84111
(801) 363-5733

VERMONT

State of Vermont Department
of Libraries
Reference Services Unit
111 State Street
Montpelier 05602
(802) 828-3261

VIRGINIA

Grants Resources Library
Hampton City Hall, Ninth Floor
Hampton 23669
(804) 727-6496

Richmond Public Library
Business, Science, and Technology
101 East Franklin Street
Richmond 23219
(804) 780-8223

WASHINGTON

Seattle Public Library
1000 Fourth Avenue
Seattle 98104
(206) 625-4881

Spokane Public Library
Funding Information Center
West 906 Main Avenue
Spokane 99201
(509) 838-3361

WEST VIRGINIA

Kanawha County Public Library
123 Capitol Street
Charleston 25301
(304) 343-4646

WISCONSIN

Marquette University Memorial
Library
1415 West Wisconsin Avenue
Milwaukee 53233
(414) 224-1515

WYOMING

Laramie County Community College
Library
1400 East College Drive
Cheyenne 82001
(307) 634-5853

CANADA

Canadian Centre for Philanthropy
185 Bay Street, Suite 504
Toronto, Ontario M5J 1K6
(416) 364-4875 (F)

MEXICO

Biblioteca Benjamin Franklin
Londres 16
Mexico City 6, D.F.
(525) 591-0244

PUERTO RICO

Universidad del Sagrado Corazon
M. M. T. Guevarra Library
Correo Calle Loiza
Santurce 00914
(809) 728-1515, extension 343 (L)

VIRGIN ISLANDS

College of the Virgin Islands Library
St. Thomas 00801
(809) 774-9200, extension 487 (L)

SOURCE: JANE C. MALIK AT THE FOUNDATION CENTER

Sources of Information for Individual Grant Seekers in Various Fields

Following is a list of sources of information about grants to individuals, based on a bibliography compiled by Jane C. Malik, a coordinator of cooperating reference collections at the Foundation Center, and updated by *The Chronicle*.

GENERAL INFORMATION

Annual Register of Grant Support, 1982-83, sixteenth edition (Marquis Who's Who, Inc., 4300 West 62nd Street, Indianapolis 46268; 811 pages; $67.50, plus $3 for shipping). Includes information on government agencies, foundations, educational and professional associations, special-interest organizations, and corporations.

Awards, Honors, and Prizes, Volume 1: United States and Canada, fifth edition, edited by Paul Wasserman (Gale Research Company, Book Tower, Detroit 48226; 900 pages; $85). A directory of awards in various fields, including art, business, education, engineering, international affairs, journalism, law, librarianship, medicine, music, photography, politics, and technology.

Catalog of Federal Domestic Assistance, 1982 Edition, U.S. Office of Management and Budget (Superintendent of Documents, U.S. Government Printing Office, Washington 20402; 1,220 pages; $30).

Directory of Research Grants, 1982, compiled by William K. Wilson and Betty L. Wilson (Oryx Press, 2214 North Central at Encanto, Phoenix 85004; 368 pages; $52.50). Includes information about grants, contracts, and fellowships.

Foundation Grants to Individuals, third edition (Foundation Center, 888 Seventh Avenue, New York 10106; 203 pages; $15). Contains profiles of programs of about 950 foundations.

Grant Information System, compiled by William K. Wilson and Betty L. Wilson (Oryx Press, 2214 North Central at Encanto, Phoenix 85004; approximately 300 pages, with monthly updates; $425, plus $50 for shipping). Includes information, generally for faculty members, on grants from government agencies, foundations, and other sources.

ARTS

American Art Directory, 1982 edition (R. R. Bowker Company, P.O. Box 1807, Ann Arbor, Mich. 48106; 721 pages; $70). Includes a chapter listing scholarships and fellowships available through colleges, museums, and organizations.

Cultural Directory II, Federal Council on the Arts and the Humanities (Smithsonian Institution Press, Arts and Industries Building, Room 2280, 900 Jefferson Drive, S.W., Washington 20560; 256 pages; $1.50 for orders received by October 31, $8.95 thereafter). Describes federal programs and services in the arts and humanities.

Dance Magazine Annual '83: Catalogue of Dance Artists and Attractions, Programs, Resources and Services (Dance Magazine, 1180 Avenue of the Americas, New York 10036; 338 pages; $20). Includes information about finances, sources, and resources for dance and dance production.

Money Business: Grants and Awards for Creative Artists, revised edition (Artists Foundation, 110 Broad Street, Boston 02110; 116 pages; $9.50). A directory of organizations offering prizes and awards to choreographers, composers, craftsmen, fiction writers, film makers, painters, photographers, playwrights, poets, print makers, sculptors, and video artists.

National Directory of Grants and Aid to Individuals in the Arts, International, fourth edition, by Daniel Millsaps (Washington International Arts Letter, P.O. Box 9005, Washington 20003; [illegible] pages; $15.95).

HISTORY

Grants and Fellowships of Interest to Historians, 1981-82 edition (American Historical Association, Publications Department, 400 A Street, S.E., Washington 20003; 88 pages; $4 for members, $5 for nonmembers, plus $1 for handling).

HUMANITIES

Overview of Endowment Programs for 1982-83 (National Endowment for the Humanities, Public Affairs Office, 806 Fifteenth Street, N.W., Washington 20506; 17 pages; free).

Grants in the Humanities: A Scholar's Guide to Funding Sources, by William Coleman (Neal-Schuman Publishers, 23 Cornelia Street, New York 10014; 152 pages; $14.95).

LIBRARY SCIENCE

Financial Assistance for Library Education, 1983-84 edition (American Library Association, Office for Library Personnel Resources, 50 East Huron Street, Chicago 60611; approximately 42 pages; 75 cents). An annually revised list of awards from state library agencies, national and state library associations, local libraries, academic institutions, foundations, and other sources of funds.

MATHEMATICS

Assistantships and Fellowships in the Mathematical Sciences (American Mathematical Society, P.O. Box 1571, Annex Station, Providence, R.I. 02901; $3 prepaid). Special issue of *Notices of the American Mathematical Society*, published every December.

MUSIC

The American Music Handbook, by Christopher Pavlakis (Free Press, Division of Macmillan Publishing Co., Front and Brown Streets, Riverside, N.J. 08370; 836 pages; $25). Includes chapters on U.S. and international musical contests, as well as awards, grants, fellowships, and honors.

Musical America, 1982 directory (ABC Leisure Publications, 825 Seventh Avenue, New York 10019; 644 pages; $30). A directory of the performing arts. (Note: 1983 directory scheduled to be published soon at $45.)

The Musician's Guide, sixth edition (Marquis Who's Who, Inc., 4300 West 62nd Street, Indianapolis 46268; 943 pages; $62.50, plus $3 for shipping). Includes sections on foundations, musical competitions, and festivals.

Songwriter's Market, 1983, edited by Barbara Norton Kuroff (Writer's Digest Books, 9933 Alliance Road, Cincinnati 45242; 432 pages; $13.95). Includes a section on awards, contests, and grants.

PHOTOGRAPHY

Photographer's Market, 1983, edited by Robert D. Lutz (Writer's Digest Books, 9933 Alliance Road, Cincinnati 45242; 576 pages; $14.95). Includes a section on awards and grants.

WRITING

Grants and Awards Available to American Writers, Twelfth Edition, 1982/83, (PEN American Center, 47 Fifth Avenue, New York 10003; 90 pages; $5 for individuals, $8.50 for libraries and institutions). A comprehensive list.

Literary Market Place 1982 with Names & Numbers, 1982 edition (R. R. Bowker Company, P.O. Box 1807, Ann Arbor, Mich. 48106; 858 pages; $35). Includes lists of prize contests and literary grants and fellowships. (Note: 1983 edition scheduled to be published soon at $37.50.)

Writer's Market, edited by P. J. Schemenaur (Writer's Digest Books, 9933 Alliance Road, Cincinnati 45242; 936 pages, $18.95). Includes a section on awards, contests, and grants.